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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, FLORENCE, S. C.

Entered as second-class matter June 2, 1909, at the Postoffice at Florence, S. C., under the Act of Congress of March 5, 1879.

ANNUAL SUBSCRIPTION, $2.00.

VOL. VI. JANUARY, 1910. No. 1

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

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JOURNAL S. C., MED. ASS'N., FLORENCE, S. C.

ORIGINAL ARTICLES.

THE SUBCUTANEOUS PLASTIC SURGERY OF THE NOSE.

(By W. P. Porcher, M. D., Charleston, S. C.)

It is generally believed by surgeons, that there is but one city of Rochester—the Mayo Rochester—but all laryngological surgeons thinks there is another Rochester—the Roe Rochester—because the city of Rochester, N. Y., has been made famous to laryngologists the world over by the pioneer work in the subcutaneous plastic surgery of the nose by Dr. John O. Roe of that city.

Having recently had the privilege of witnessing the results of many of these operations, where deformities of the nose of every kind had been corrected subcutaneously and without injury to the skin, and where the normal configuration of the nose had been restored as well as the respiratory function, I will endeavor to describe some of this work and where possible will use the language of the doctor himself.

Says Wells "A skillful dissembler may disguise in a degree the expression of the mouth, the hat may be slouched over the eyes, the chin may be hidden in an impenetrable thicket of beard, but the nose will stand out and make its sign in spite of all precautions. It utterly refuses to be ignored and we are, as it were, compelled to give it our attention. Being exposed to every variety of contusion as well as to the ravages of disease and inherited deformity, the nose exhibits an innumerable variety of variations from the normal. In fact so commonly are these deformities met with and so easily does the sufferer make up for the resulting interference with respiration by acquiring the habit of mouth breathing that non-observant persons have come to regard these deformities as simple facial peculiarities of the individual and the individual becomes accustomed not only to the facial deformity but to the abolished functions of the nose as well. The factors which seem to have contributed most to the remarkable results which Dr. Roe has obtained are, 1st: the extraordinary originality which he has shown in devising intra-nasal and subcutaneous operations adaptable to each case for the reduction of the deformity: 2nd: the complete control which he obtains over his patients by the combined use of local and general anaesthesia. In nearly all these cases local anaesthesia is quite sufficient to render the operation entirely painless, by injecting a weak solution of cocaine hypodermically into all the parts on which he is to operate. In those cases which from any cause a general anaesthetic is required, the latter is made very easy by the preliminary use of a hypodermic injection of morphine, hyoscine and cactin; the small amount of chloroform then required is delivered through a bent tube in the mouth. 2nd. His perfect antiseptic technique combined with the use of a metallic form or splint to hold the nose rigid after the correction of the deformity, packing the nose internally with iodoform guaze when required to furnish additional support and a number of instruments which he has devised especially for these cases.

"In studying the etiology of nasal deformities it must be borne in mind that such an abnormal condition must be due to a great variety of causes. It may be due to an abnormal development of the nose, an overgrowth amounting in some cases to an elephantiasis. Or it may be due to an unequal growth of the two sides of the nose or of the two sides of the laminae of the septum, distorting both the septum and the nose. The distortion may be the result of an extra or intra-nasal neoplasm, or as is frequently the case, of a traumatism with a definite history or presenting a pronounced mark of the injury. It may be of constitutional origin with a luetic history, presenting the definite specific manifestations shown in the excavated shrunken and caved in nose that results from the destruction of the bony or cartilaginous frame work, or perhaps of both and sometimes shown in the dactilitic condition occasionally seen. The deformity may be the result of lupus that has been arrested, leaving scars and deformities which must be carefully differentiated from luetic manifestations. The abnormal condition also may be of tuberculous nature associated with

similar manifestations in other parts of the body or finally it may be caused by ulceration or by a growth of a malignant nature."

"All chronic affections of nasal cavities even unattended by obstruction to the passages tend to produce by sympathetic irritation, more or less congestion of the vessels at the end of the nose and by reason of these vessels having less power of resistance an undue distention of them takes place, the surrounding tissue becomes thickened and an enlargement of the end of the nose occurs. This is very commonly observed during the treatment of nasal diseases. The deformities which most frequently occur in the nose may be broadly divided into the saddle back, the hump back and the snub or turned up nose usually accompanying the saddle back variety, or as Dr. Roe classified these deformities, they may be further divided into those which affect the bony portion and those which affect the cartilaginous portion. Those which affect the bony portion may be either vertical or lateral.

The vertical deformity may be either convex or concave. The lateral deformity may be spatulated, flattened or deflected.

Deformities affecting the cartilaginous portion may be in the tip or the alae. Those in the tip may be due to excessive or deficient tissue and deviations from the middle line. Deformities in the alae may be due to collapse or undue expansion produced by disease injury or inherited peculiarity.

Deformities of the nose of whatever variety are usually accompanied by a proportionate deviation from the normal of the internal nostril, and consequent interference with the natural function of the nose. Hence in the majority of cases it is necessary first to restore the normal patency by the removal of such obstructions as result from the deformities.

Rigid asepsis and antisepsis are observed in all operations on the nose to avoid septic infection of the wound and subsequent breaking down of transplanted tissue. The nose is first washed out with Bichloride solution post-nasal and anterior-nasal and after the operation it is packed with iodoform gauze, and if additional pressure is required to prevent hemorrhage Berney's compressed sponge is used.

A mold of block tin or copper covered with adhesive strap and fitted to the outside of the nose is next applied so as to hold it rigidly upright. This must be continuously worn for such a length of time as to make the healing permanent.

The operative treatment for the relief of nasal deformity varies with each individual case and the ingenuity of the surgeon is taxed to meet the requirements. Many operations are often necessary before the desired results are obtained in a single case, but by continuous wearing of the metalic form or mould, and by the use of adhesive plaster making pressure or removing it when indicated a practically useful and attractive nose results.

The limits of this paper make it impossible to give even an outline of the various deformities of the nose and the subcutaneous intra-nasal operation for their correction. I will endeavor however to describe for you the

three most common deformities, namely the snub nose, the saddle back and the hump back and the methods of operation devised by Dr. Roe and will use as near as possible his descriptive language in doing so.

The snub or turned up nose. "In the snub or turned up nose the operation is performed as follows. We first deaden the sensibility of the end of the nose with cocaine, (general anaesthesia being unnecessary) and brightly illumine the parts. If the tissue is to be removed from that portion where the mucous membrane is not too firmly adherent, the membrane should be dissected back to be replaced after the operation. The end of the nose is turned upward and backward and held with a retractor by an assistant: then sufficient of the superfluous tissue is removed or dissected out to allow the nose to conform to the shape desired. Great care must be used however not to remove too much tissue and also not to cut through into the skin, lest we may have afterwards a scar or a dent in the external surface of the nose. In some cases no after treatment is required, but in others it is advisable to mold a saddle or splint as it were, to the top of the nose, so as to make it while healing, assume the shape we wish to obtain. In some instances the large and unsightly end of the nose is not due to an excessive tissue but to a malformation of the cartilages of the alae, bulging outward with a corresponding concavity on the inside. These noses can be very readily moulded into shape by cutting with a small tenotomy knife through these cartilages, in different places sufficiently to destroy their elasticity. Then by inserting a silver or hard rubber tube of the proper size and shape, into the nostril, and conforming the saddle to the outside of the nose we have it encased in an outside and inside splint, that compels it to conform to the exact shape we desire. While performing this operation and moulding the nose into shape we must not neglect to preserve the nasal passages free and unobstructed."

Hump back or convex vertical deformity of the bony portion of the nose. This deformity is the one most often found uncomplicated, and the operation for its correction is in the main performed as follows. The skin is first raised from the projecting portion by incising the wall of the nose from the inside of the nostrils, through to the underside of the skin. The opening is then enlarged sufficiently to admit the instrument required, which may consist of bone scissors, rongier forceps, a slender saw, or such other instrument as may be necessary according to the conditions present. In removing the projecting portion, great care must be exercised not to remove too much of the redundant tissue, lest a depression be left in the top of the nose which may be more unsightly than the original deformity. This mistake more readily happens in those cases in which the upper portions of the nasal passages extend all the way up into the projecting portion. In these cases the nasal passage is very easily opened on removing the projecting angular portion.

Concave vertical deformity of the bony portions of the nose—the saddle back nose. The operation for the correction of this deformity is entirely different from the last and consist in filling in the depressed portions with

flaps of tissue taken from the unduly prominent portion, subcutaneously, thereby lowering that portion at the same time.

A case illustrative of saddle back nose was operated on as follows: The displaced tissues found on the sides of the nose were restored to the top by raising the skin from the dorsum, through an incision made from the interior of the nostril and turning the flaps made of this displaced tissue upward to fill in the depression in the centre of the nose. A portion of this displaced tissue consisted of bone, which was sawed loose with a sharp slender saw. When this was completed a flap was made from the redundant cartilaginous tissue constituting the ridge on the right side of the septum. In order to get this latter flap to the desired spot on the dorsum it was necessary to turn the flap twice to reach the place. This was done by cutting the lower part loose and turning it up allowing the upturned edge to become attached sufficiently to supply it with nutriment, when the other end was cut away and again turned upward. When the further end had again become firmly attached, the lower end was cut away and turned into place, which completed the filling of the top of the nose very nicely. The end of the nose still projected slightly above the line of the dorsum. This was lowered by removing sufficient tissue to bring it down to the line of the dorsum. The nose was then held in place for a considerable period by an external dressing until the parts were thoroughly healed, and the nose showed no tendency to become distorted.

The operations for the reduction of hypertrophied turbinate and deflected septa are equally effective. After cleansing and disinfecting the nose with bichloride solution, the hypertrophied turbinate is incised lengthwise with a long handled narrow bladed knife curved on the flat and a triangular piece is removed from the under side. Pressure is then applied with iodoform gauze or the Berney's compressed sponge utilizing the twisted septum for support until healing of the raw surfaces has taken place.

Reduction of deviated septa. It is a very self-evident fact that a deviated septum is larger or wider and longer and has a greater extent of surface than a straight one, and in order to provide for this redundancy when the septum is straightened it is necessary either to remove a portion of the septum sufficient to allow of the reduction without wrinkling or that an incision should be made through the greatest convexity so as to allow the edges of the incision to lap over. Of course, when the deviation is a vertical one, the incision must also be vertical and when the deviation consist of a horizontal as well as a vertical bend so as to make it somewhat conical as if pressure had been applied at one point indenting the septum, the incision should be both vertical and horizontal and each should be made through the septum obliquely and along the direction of the axis of the greatest bend or convexity. With the aid of Roe's fenestrated forceps the bony and cartilaginous portion of the septum are both rendered thoroughly flexible and placed in the median line. After the operation the nose is cleansed and made aseptic and it is then packed with iodoform gause on the convex side. This is allowed to remain for a few days until

sufficient inflammatory exudate has been thrown out or ossification of the fractured bone has taken place, so as to maintain the angle of deflection in its new and straightened position.

In case there has been a double deflection the packing should be placed on each side as far as possible opposite the point of previous convexity.

The advantages of this form of support over the hard rubber tube or the various other mechanical appliances that have been devised for this purpose is that the nasal passage can be maintained thoroughly aseptic which is impossible when these other appliances are used and moreover, the healing of the wound is not only more readily promoted but the danger of erosion of the wound, thereby preventing healing and endangering hemorrhage is entirely avoided.

Berney's compressed cotton tampon if they have been sufficiently sublimated previous to compression to maintain them thoroughly aseptic is an ideal dressing for this purpose, although care will have to be exercised lest too large a sponge be selected that may after becoming wet and expanded force the septum over beyond the median line. If the nostril and the dressing has been made thoroughly aseptic and the dressing carefully and properly inserted, it can be left in situ for from three to four days before removal. It can then be very readily removed without pain or discomfort by slightly dazing the patient with a few whifs of chloroform. The nostril is then thoroughly irrigated with bichloride solution, anaesthetized with cocaine, and fresh plugs similar to the previous ones introduced. These are left in for two days longer and removed.

By this time the septum is usually self-supporting, sufficient provisional callus or inflammatory exudate having been thrown out to render the parts rigid enough to require no further support. It is however, advisable to watch the septum to see that there is no sagging back, necessitating further support for a few days longer. If it should be necessary a hard rubber or aluminum tube can now be used to advantage. It should be entirely free from perforations, and smooth, so that there may be no lodging places for discharges to decompose in.

REQUISITES FOR THE TREATMENT OF THE PSYCHO-NEUROSES: PSYCHO-PATHOLOGICAL IGNORANCE, AND THE MISUSE OF PSYCHOTHERAPY BY THE NOVICE.*

(By Tom A. Williams, MB. CM., Edin., Washington, D. C.)

We hear much about the neuroticism of modern days, the popular belief being that neurasthemia[1] as it is loosely called, hardly existed until the latter end of the 19th century. It is supposed that this state of matters is due to the fatigue to the nerves of the modern strenuous life.

*Read by invitation at the Symposium on Psychotherapy before the Washington Therapeutic Association, April 10, 1909.

As a matter of fact, confessions, memoirs,[2] and pictures of the time show that neurotic states occurred in the Middle Ages even more widely than they do today. Again, the "vapours" so often alluded to in the literature of Queen Anne's time, would now-adays be called nervous prostration, and a "rest-cure" would be prescribed; but in that less enlightened age, they were appraised, empirically it is true, at their real value—mental vacuity, discontent or failure of adjustment to environment.

The last factor is shown by a close analysis to be the real cause of most cases of so-called nervous prostration;[3] and the indiscriminate administration of the rest cure without a clear psycho-diagnosis will in the future be relegated to the limbo of such other medical superstitions as blood-letting and anti-pyretics.

Of course, adjustment fails when the nerve cells are poisoned, injured, receive insufficient oxygen or irregular supply of blood; but these are not psychic difficulties and can be provided against by the physician and the pathological chemist. He succeeds in virtue of the precision with which he estimates the derangements in a body whose normal functions he has spent years in studying.

Similarly, the psychiatrist can succeed only by an understanding of normal mental reactions, and by a profound study of the data of morbid psychology. It must be recollected that the patients referred to him are those in whom empirical methods have failed. For example, they are "suggestioned" *ad nauseam*: one patient told me how thankful she was that I did not tell her she was better or minimize her mental suffering for she hated the sight of a doctor; as each in turn made light of her state, and said she would soon be better, whereas she became worse and the confidence she had reposed in her first physician had become profound distrust at the end of three years, at which time I was called in.

Another gross empirical error is the injudicious appeal to the patient's will-power.[4] The doctor who commits this solecism does not realize that the patient has already exhausted his volitional power of response, previously highly stimulated by the complexities of social and professional environment. It is as if a lost traveller in a jungle which he does not know were directed to find his way back to the camp from which he had strayed. The real guide will show the way. Such symposia as this are a sign that in psychotherapy blundering empiricism has had its day.

We should laugh at the surgeon who tried to tie the lingual artery while ignorant of the anatomy of the sub-lingual triangle, or even to set a dislocation without understanding the structure of the joints; but the arrest of a morbid train of thought and the setting a mind at rest are much more delicate operations than those of the surgeon; and yet, although the art requires finesse for its acquirement and years before the *tactus eruditus* is acquired, very few men hesitate to rush in where angels fear to tread, into the sacred precincts of the soul. A bull in a china shop would be less out of place.

Such assumptions of confidence where skill has not been acquired have in the field of gynecology called down just reproach from the masters of

that art.[5] In morbid pathology, the result has been, if not less disastrous to our patients, certainly much more so to ourselves, both in wealth and prestige. The Christian Science Church is a growing canker of contempt for science and its medical exponents, and its doctrine is inculcated to the plastic mind of childhood, to be there ineradicably fixed, even though enlightenment may come. The Emanuel movement will become another source of malign influence; for it has now been publicly repudiated,[6] even by the few neurologists who were weak enough to countenance its apparently ethical commencement.

We can overcome these influences only by acting together, as is done in all successful organizations. The public requires and demands psychic treatment. They receive from the medical man, burdened with the complexities of his art, only indifference or an affectation of knowledge which they are quick to penetrate. I even know of a case where a medical man sent a patient to a mental-healer who advertises in the newspaper.

Now the remedy should be obvious enough. It is to provide facilities for instruction of medical men, first in psychology and psycho-pathology, and then in psycho-therapeutics. To do this, wards and out-patient clinics must be provided in the hospitals, to which competent teachers must be appointed. In the meanwhile, the doctor who endeavors to bungle through the treatment of a psycho-neurotic case, without understanding psycho-physiology and pathology, and with only a rough empirical experience, is guilty of a crime to his profession. Such cases should be treated, at least under the advice of a specialist, until the physician has learnt to do so himself by observation and study and expert direction.

It is impossible in ten minutes to even indicate the kind of problems which psychotherapy studies,[7] all of them depending upon analytic diagnosis of mental make-up, as well as of the physical factors which contribute to psychic insufficiency.

I may mention, firstly, the mythomanic[8] tendency, that is, the impulse to take what appears the easier way of complete indifference with regard to truth. It is fundamentally a lack of foresight due to a deficiency of intelligence; but it has been acquired in early childhood, and has become an affective habit, which the intelligence is not powerful enough to overcome. Its prevention, and later the cure depends uopn the principle of "conditioning the reflexes," as shown in its most simple terms by Pallow[9] in dogs, when he changed at will the stimulus needed to provoke gastric or salivary secretions. The whole art of education is based upon this principle of associating pleasant feelings with useful activities, of which truth telling is certainly one of the greatest. The re-education of a bad habit is similar in principle, but more difficult of accomplishment, and is best illustrated in the arts of playing a musical instrument or of speaking and singing.

Time forbids to trace the stages between such simple measures and the full complexity of the intellectual readjustment which psychotherapy attempts.

The problem is comparatively easy compared with that where the

emotions and feelings are concerned, as for instance in such cases of sexual perversion as the classic one of Kraft-Ebbing,[10] where the sexual act could be performed only when the patient's wife was dressed in a white apron, owing to the circumstance that it was with a maid so dressed that he had first had connection. Still more striking in this connection is the case recently reported by Stcherbak,[11] in which the only means of producing orgasm was the placing upon the knees the elegantly booted lower extremities of a fashionably dressed woman. The sexual factor in the production of neuroses is most important, and it is time the reticence we display towards it cease and be replaced by thorough discussion.

But emotion may be conditioned, too. Indeed, it is the affective accompaniments which give intellectual attitudes their dynamic power.

This is an important element in cases of traumatic neuroses. Here the replacement of the morbid feeling tone by another cannot be direct, but must be accomplished through the replacement of the causative idea by another one. *Ex cathedra* affirmation or cold appeal to the intellect cannot change an attitude of mood of any standing. The method of doing this may be illustrated by the gastric neuroses,[12] where a false fixed idea creates a feeling of disgust while food is being eaten, which in turn inhibits the digestive secretions. As I have pointed out elsewhere, this morbid conditioned reflex has usually its source in the unskillful suggestions of doctors[13] who have not understood the role of the psyche in pathology, and who have gone on treating the symptoms by referring them to the stomach itself, thereby only fortifying the patient's error; so that by the time he reaches the psychotherapist, he is inaccessible to conviction that the trouble is really in his head, as Dejerine[14] puts it. Accordingly he cannot be convinced by assertion or argument, as he has lost confidence in these; but is convinced by the stern logic of events, shown by his rapid gain in weight while isolated. It is then that the physician's dialectic finds its opportunity,[15] and the patient's false idea is dispelled.

I have shown elsewhere[16] that both of these conditions are forms of hysteria, in that they are susceptible of "production by suggestion and of removal by suggestion-persuasion."[17]

Some patients of the more intellectual grade are put on the road to recovery by the first interview, although the recovery from emaciation and the starvation habit which the stomach has acquired requires some time.

In traumatic neurosis my experience has been more favorable,[18] one interview often sufficing. I attribute this, however, to the fact that these patients are in a better position than the gastric ones to realize the truth; for until my psycho-therapeutic interview, they have heard only *ex parte* opinions or indiscriminate sympathy for an attitude which at heart they would be glad to be rid of. Without confidence given by a thorough knowledge of organic disease of the nervous system, the neurologist's diagnosis and affirmation cannot be positive.[19] When to this is added the muddled conceptions so prevalent about the traumatic neurosis, one cannot wonder at the reproaches heaped upon our profession as medico-legal experts.

From these types of what might be termed untruthful reaction to environment, I trust that my hearers will gain at least a slight conception of the problems with which psychotherapy deals; and that from a comprehension of these clearer cut conditions, they may be in a better position to estimate the much commoner cases where one may be called upon to guide into productive and happy channels perversions of disposition, such as despondence, suspiciousness, facile emotionalism, religious sentimentalism, social ashamedness, weakness of character, and morbid fears, pains, besetments or any form of inadequacy to personal and social requirements.[20]

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INFANTILE SYPHILIS.*

(By W. P. Cornell, M. D., Charleston, S. C.)

Infantile Syphilis may be either hereditary or acquired, and may take origin in one of five ways.

1. At the moment of conception by the father's semen. (Paternal heredity).

*Read at the meeting of the South Carolina Medical Association, held at Summerville, S. C., April, 1909.

2. At the moment of conception by the mother's ovum. (Maternal conception heredity).
4. During birth from lesions of the mother's genitals. (Infection in parturition).
5. To the infant after birth either from the parents, by a kiss or in suckling; or from an indifferent person as a wet nurse.

Infection in parturition and from parents or wet nurse is acquired syphilis and differs from the hereditary in the presence of a chancre at the point of infection and the absence of the grave visceral lesions of hereditary syphilis.

Colles law states, "that a syphilitic father may beget a syphilitic child without *apparently* infecting the mother, yet this mother cannot be infected by nursing the child, though the child will promptly infect any other wet nurse not previously infected with syphilis."

This law states clearly "without *apparently* infecting the mother" and it is now apparently pretty generally accepted that every woman who bears a syphilitic child is herself infected, and therefore so-called paternal heredity is probably very rare, if possible.

It is well known that succeeding pregnancies bring forth increasingly less infected fetuses until finally the mother bears a healthy child. This points strongly against the Maternal Conception Heredity as being a common means of infection, and for all syphilitic fetuses, except those aborted in the first few months one may doubt the ovum's having been the source of infection.

During the first seven months of gestation a fetus may be infected with a syphilis acquired by the mother. It is doubtful if this is possible after the seventh month.

In Maternal Post-Conceptional Heredity we find the vast majority of men believing that the one thing most likely to affect the vitality of the fetus and its susceptibility to disease is the condition of the placenta.

Syphilitic inflammation of the placenta becomes less marked and extensive with each succeeding gestation and permits better and better nourishment of the fetus and by so much retards its disease and in this way makes clear why eventually a healthy child is borne.

Infection in Parturition is extremely rare and doubtful. Infection after parturition of a healthy child borne of syphilitic parents is extremely probable.

Opinion is divided as to whether hereditary syphilis of the third generation is possible; but, in as much as a man's capacity to transmit syphilis to his wife almost always ceases within five years, and a woman's capacity to bear syphilitic children within ten years, it would seem very improbable that a fetus should retain the power of transmitting the disease until it reaches maturity. Still, many believe in the transmission through pure heredity to the third generation.

The dangers of syphilitic inheritance varies greatly with the age of the disease in the parent, being greatest in the first year, great in the next two, greatly less in succeeding years, though it has been apparently found

at varying dates up to twenty years, but we must not forget that many cases are on record of people having been cured of one attack only to become infected as shown by a true chancre succeeded by secondary signs.

Hereditary Syphilis is divided by Hochsinger into: 1st, Fetal; 2nd, Infantile (first 3 to 6 months); 3rd, Relapses in Infancy (until the fifth year) and 4th, Late Hereditary Syphilis.

The importance of these stages decreases through the series; fetal syphilis being fatal in 50 per cent.; Infantile killing 50 per cent. in the first three months of extra uterine life; Relapses are less frequent, less severe and rarely fatal; and the late or delayed hereditary syphilis, which occurs after the fifth year differs in no respect from tertiary spyhilis in the adult.

It is now generally accepted that the spirocheta pallida is either the cause, or that it is one phase in the life cycle of some micro organism which is the cause of syphilis. It is a cylindrical spiral organism having from 6 to 25 spirals. When examined in a fresh specimen it is seen to be very motile, though it retains its spiral shape. It is usually, for purposes of better study, examined in the stained methods; which I will not go into; but there are many different spirochetae now differentiated and named so that only one trained in laboratory technique and experienced, should be trusted in deciding as to its presence.

They are found in abundance in the lesions of early hereditary syphilis, in all the organs of still-borne syphilitic children, and practically in any tissue of a syphilitic patient; though they are rare in the lymph vessels and nodes, and when found in the nodes are usually in and about the blood capillaries at their circumference.

Tertiary lesions show them only in their periphery, never in the necrotic center, or in its (the gumma's) secretion.

Probably they are distributed by the lymph rather than by the blood currents, and directly excite the perivascular inflammation characteristic of all syphilitic lesions; and are destroyed by phagocytosis.

It is important to remember that syphilitic secretions cease to be infectious after 12 to 24 hours, and much sooner (at most 6 hours) when dry. This expiains why we are not constantly seeing instances of innocently acquired syphilis.

Dogs have become infected through experimental work and might therefore become a source of infection in a house; if this is possible it is worth remembering.

The Pathology of fetal syphilis differs from that in the adult chiefly in its acuteness. In the adult the disease localizes itself here and there in small areas and shows special affinity to the skin and mucous membranes, later to the nervous system, the underlying process being always specific arterial disease. In the fetus the viscera are chiefly affected, and secondly the bones, the skin being immune till just before or after birth. Again in adult visceral involvement the process is localized rather than diffused throughout the organ as in fetal syphilis.

The viscera chiefly involved and most frequently are, in the order of importance, the lungs, the liver, the kidney and the spleen.

The infiltration is a diffuse one arising from the smallest vessels in the organ, with later contraction and obliteration of the vessels, with this hyperplasia of the connective tissues, occurs hyperplasia of the parenchyma.

The placenta also shows the same changes and is usually found to be large, and firmer than normal, also the cord. The placenta may be 1-4 to 1-3 the weight of the child.

Marked changes in the viscera do not occur till after the 4th month of pregnancy.

Symptoms: The fetus affected with visceral lesions may come to one of three ends:

1. It may be aborted or still born.
2. It may be born manifestly syphilitic.
3. It may be born apparently healthy.

1. Death in utero is often caused by hydramnia, due to syphilitic phlebitis of the cord, or it may die by inanition from overwhelming visceral disease. It is usually aborted between the 4th and 7th month and is usually dead and macerated. Monstrosities are relatively frequent.

2. If borne alive it is small and wizend, with loose skin, on which there may be an eruption; with snuffles and a hoarse cry, sunken and inflamed eyes, and may be pseudo-paralysis.

3. When apparently healthy looking, (the skin involvement not yet having taken place,) the direct evidence of visceral syphilis will be found in enlarged spleen and liver or a pseudo-paralysis from osteochondritis. The infant born apparently healthy, will soon develop snuffles which will soon be followed by skin lesions.

Snuffles. Though the earliest and most constant symptom, is one of the least characteristic, (as it may be due to many causes.) It usually shows at birth but may not appear for several months. It begins as a hypertrophy of the mucous membrane, dry congestion, followed by ulceration with a profuse mucus, blood-tinged, acrid discharge, which excoriates the upper lip. Perforation of the septum is rare but the development of the nasal bones is interfered with, with resultant deformity. Restlessness, snuffles and inability to nurse are symptoms produced, the last causing grave nutritional disorders.

The skin, through the malnutrition, is very subject to irritation, and the syphilitic processes attack these irritated areas by choice. The first skin lesion to appear is the macule, usually in the nose. Then it appears on continguous surfaces, as about the genitals and the buttocks, which have been irritated by the diapers. Then the flexor surfaces of the thighs, the palms and soles, lips and chin; the scalp, arms and legs less frequently, and the trunk above the diaper least often.

Confluence, due to irritation and moisture, is seen in the same places.

Pemphigus, the earliest, one of the rarest, and the most ominous skin lesion of hereditary syphilis, appears before birth or in the first week,

sometimes in the second or third week, and chiefly on the palms and soles from whence it spreads over the body.

When it appears before the second week of extra-uterine life, the child will die.

Pemphigus neonatorum doesn't come before the second week, and only exceptionally on the palms and soles, and there are no other evidences of syphilis, and probably another or other cases.

Lesions of special regions are, *Erosions of the lips,* which start as eroded mucous papules and quickly become fissured, and changed into deep-red, oozing cracks which are painful and which interfere with nursing. They usually come at the angle of the mouth and on healing leave as reliable stigmata of hereditary syphilis scars which are linear and radiate from the lips.

Onychia and Paronychia. The typical nail is raised in the centre and depressed laterally; usually all the nails are affected, and often are undermined by a paronychia.

Bones. The knee and elbow are most commonly affected with osteochondritis, causing slight distortion and enlargement at the epiphyseal line.

Syphilitic Pseudo-paralysis of the new born is rare, and usually affects the elbow; it may be polyarticular. It is diagnosed by the child's inability to move the arm. The child should be held up by its axillas when testing, and the part will hang helpless and flaccid. On pinching the muscles contract but the arm doesn't move, yet no resistance is offered to passive movements.

Crepitation is sometimes felt, making one think of fracture, and fluctuation may be gotten also.

Periostitis affects chiefly the skull; giving, if frontal, the prominent brow. Parrot's Nodes and cranio-tabes are really of rachitic origin.

It may be well to remember that true rickets comes on usually after the 6th month and affects chiefly the legs, that the spleen isn't as markedly large, but that indigestion and enlarged abdomen are common; also, anaemia isn't so marked as in syphilis.

Syphilis affects the head chiefly and does have large spleen and usually presents itself before the fourth month.

Dactylitis is more common in hereditary than in acquired syphilis.

Glands. Lymphadenitis is not typical of hereditary syphilis; though marked epitrochlear enlargement is of some diagnostic importance. The enlargement of other glands is usually directly attributable to adjacent lesions.

Syphilis of the testicle is much more common than tuberculosis; increase in hardness is the only sign we have of its presence.

Enlargement of the spleen implies the same condition in the liver and vice versa, it presents in 30 to 40 per cent. of the cases in the first three months.

Jaundice due to syphilis is rare, and ascites doesn't appear till a later age.

Hydrocephalus is fairly common and is due to specific basilar meningitis usually, and as its appearance due to other causes is accompanied with a hopeless prognosis it is well to treat all cases as syphilitic and give them the benefit of the doubt as in cases of enlarged liver in adults.

Eye Lesions are rare at this period.

Acute otitis media from extension from the throat is common.

Endocarditis and aortitis are mentioned by some and it is said that any valvular heart lesion in a child who gives no history of articular rheumatism should be suspicioned as syphilitic and given the benefit of treatment.

Relapses of early childhood occur usually in the first two years, sometimes for several years later. Of the skin lesions condylomata are the most common, being more so than in the first attack.

Hemiplegia and epilepsy, chorio-retinitis and optic neurits are common. Stridor-thymicus, due to pressure on the trachea by an enlarged thymus; paroxysmal hemaglobinuria (suggesting filaria) and anaemia pseudo-leukemia infantum, which occurs from the 10th to the 24th month of life.

Rickets is the greatest source of error in diagnosis at this period.

Late Hereditary Syphilis.

From the 6th to the 8th year and again at puberty, hereditary syphilis may relapse. It being uncommon at other times. Lesions after puberty are extremely rare.

Late hereditary lesions differ from early acquired lesions in being chiefly lesions of the eye, deafness, perforation of the palate and septum and diffuse periostitis of the long bones.

Syphilis fills out the anterior surface of the tibia whereas rickets bends the bones anteriorly.

The chief stigmata of Hereditary Syphilis are Hutchinson's triad, i. e.,

1. Pegged upper central *permanent* incisors.
2. Interstitial Keratitis (or its scar).
3. Nerve deafness (loss of bone conduction).

The upper permanent incisors and the six year molars are the teeth most frequently affected because they are in process of development during the first three months of extra-uterine life at which time hereditary syphilis shows its greatest virulence.

Hutchinson's teeth aren't pathognomonic, and after the age of twenty to thirty the bevel edge is worn off.

Fourniers teeth consist in an erosion of the summit of the six year molars. Three quarters of the tooth is normal, the upper quarter being atrophied, diminished in all its diameters and separated from the normal part by a circular ridge. After five or ten years of use this eroded crown wears away leaving a short tooth with a smooth top.

Internal ear or nerve deafness in children or young persons is almost exclusively due to syphilis. It comes on very suddenly without pain or discharge.

A history of miscarriage is obtainable possibly in all families and it is well to remember that in syphilis it is almost always the first pregnancy that mishaps.

Hochsinger accepts as pathognomonic, radiating scars over the lips, when seen in later years.

If Gray Powder in dosage of from one to two grains, three times a day, produces no effect in two weeks, stop the treatment, as it is probably not syphilis, is a diagnostic test used by some.

Prognosis. Infants usually die from pneumonia, convulsions and digestive upsets or from marasmus. Pemphigus, visceral disease and osteochondritis are bad prognostics.

Treatment. In infancy mother's milk is as important as mercury and if the mother is treated throughout gestation with mercury the child will be borne uninfected.

The treatment of the child should cover a period of two years and be repeated at the time of the second dentition and again at puberty a short course.

Iodide of Potash is useless in the first year.

When giving the mercury by inunction or the skin method place on the band a mixture of one part of the official mercurial ointment with two or three parts of vaseline. Stop it for a time if diarrhea or dermatitis arise.

Internally Gray Powder gr. 1-4 to 1-2 with sugar tid and increase rapidly to gr. 1 tid.

For very rapid effect give calomel gr. 1-10 twice a day till bowels become loose.

Change diapers frequently, keep clean, and use dusting powders freely.

Erosions are dusted with calomel and starch one to two.

Snuffles yield to Nug. Hydrarg. Ammon. in the nose.

Don't incise furuncular lesions; if they break, keep them clean.

In relapses after the second year give Potasii Iodide gros. iii to v tid with mercury 1-3 to 1-2 the adult dose.

Parenchymatous Keratitis is unaffected by syphilitic treatment.

If with a first child syphilitic the mother is told, she will take treatment faithfully and there will be a healthy second child.

Wait for the proof (secondary rash) in all men before starting treatment and then they will keep up their treatment and so not infect the women.

NEPHRITIS.*

(By B. W. Hunter, M. D., Charleston, S. C.)

By the term Bright's Disease, I will include several distinct forms of

*Read at the meeting of the South Carolina Medical Association, held at Summerville, S C., April, 1909.

inflammation of the kidneys, and other renal diseases.

Like Tyson, we will not exclude from the catagory any affection of the kidney attended by dropsy, tube casts and albuminuria either appearing together or in close relation to each other.

Rokitansky included lardaceous Disease.

Reinhardt & Frericks suggested the unity of Bright's disease in classing the different forms as stages.

First, Hyperemia; second, Exudation with faulty degeneration of epithelium, and third, new growth of connective tissue with resulting atrophy of the kidney. Even the cyanotic kidney from Valvular Heart disease were included, as *Casts were* present.

There are three conditions of Bright's disease: one, a parenchymatous nephritis, which originates in the Tubules. Second an Interstitial Nephritis originatting in the Inter Tubular Tissue; and third an Amyloid degeneration originating in the blood vessels.

What some would call parenchymatous nephritis others would call diffuse nephritis, because the Tubules and their epithelia are the main seat of the diesease, but the stages of Hyperemia Exudation and Atrophy justify Frericks divisions.

The definition and synonym of Tyson condense our knowledge of Bright's disease, and I will use them here.

Parenchymatous Nephritis is an acute inflammation of the kidney, in which the epithelia of the Tubles is the primary and principal seat of inflammation—also called acute nephritis, acute Tubal nephritis, acute Bright's disease, acute catarrhal nephritis, albuminous nephritis, hemorrhagic nephritis, acute albuminuria, acute renal dropsy.

Chronic Parenchymatous nephritis is a chronic Hyperplastic process in the kidney, which has its essential and principal seat in the epithelia of the Tubules, but in which interstitial changes of the nature of nuclear proliferation are more or less constantly present.

Chronic Parenchymatous nephritis is also known as chronic Tubal, chronic catarrhal diffuse nephritis, and large white kidney.

Lardaceous disease is that form of chronic Bright's in which the tissue elements of the kidney are more or less infiltrated with a peculiar albuminoid substance, resembling melted wax or boiled starch, but which is best recognized by its striking a deep mahogany red with a solution of Iodine.

Synonyms are, Amyloid disease, waxy kidney, albuminoid disease.

Interstitial Nephritis is a slow inflammatory process seated in the interstitial tissue, which becoming abnormally increased, contracts and destroys the tubular elements of the kidney, thereby reducing its size, and producing conditions more or less covered by the following synonyms: Contracted kidney, renal cirrhosis, cirrhotic kidney, granular kidney, granular degeneration, renal sclerosis, red granular kidney.

Suppurative interstitial nephritis is that form of nephritis which results in formation of abscesses, sometimes called pyelo-nephritis, surgical kidney, etc.

In cyanotic induration we have a peculiar indurated condition of the kidney, due to a simple hyperplasia of its interstitial tissue which results from long continued passive congestion, otherwise called passive congested kidney.

This condition shows that simple engorgement of the kidney is not a prime factor, as destruction of tubular epithelium and other pathological conditions are characteristic of some other form of kidney disease.

An examination of the urine gives a high specific gravity filled with urates and large uric acid sediment.

It is a mistake to suppose that Bright's disease is simply a disease of the kidney, no more, no less.

In the last decade we have discovered a much more comprehensive condition.

In the attempt to give recognition to anatomical, chemical and etiological findings, the amount of literature has only tended to confuse the mind of most of us, and tended to delay the recognition and minimize the importance of extra renal symptoms.

For the purpose of this paper, I will do as some others have done before me, make the classification of parenchymatous and interstitial nephritis acute and chronic.

Dr. A. B. Conklin says:

The term Bright's disease though palpably inadequate, as heretofore applied, no longer expresses our conception of certain co-related processes, may still be used, by sufferance at least, for want of a more acceptable term to cover. The more than incidental association of nephritis with well defined cardiovascular changes and resultant cerebral lesions.

Although the structural changes occurring in heart and blood vessels are found more often in the chronic cases, due to the time it takes for these formations, we find in the acute cases the same increased blood pressure which leads to the changes above mentioned.

The various forms of arterial degeneration are the outcome of long continued high blood pressure.

We find the heart Hypertrophied, accentuation of the aortic second sound, displacement of the apex impulse to the left, and often dilation with broken compensation, mitral systolic murmur from relative insufficiency dyspnoea, palpatation, ofttimes dropsy, and endo-por peri-carditis.

The structural changes in the vessels are arterio sclerosis, atheroma, miliary aneurism in the brain, embolism, thrombosis, degeneration of coronary arteries with myocarditis.

Degeneration of cerebral arteries with apoplexy, ringing in the ears, pulsation in the head, amurosis, timblyopia, etc. What are the causes of this degeneration? Long continued high blood pressure, the pathognomonic sign of which is short, sharp clicks upon closure of the aortic valve.

Valvular disease of the heart may lead to nephritis through disturbing the circulation in the kidney—but most often the kidney disease preceeds the heart disease. We know that the degenerative changes found in

the renal arteries, are but a part of a general primary vascular hypertension with arterio schlerosis in chronic cases.

In the matter of diagnosis, prognosis and treatment, we had best trust more to the information derived from an estimate of the circulation than from urinary analysis.

The most reliable data about the urine, are those most quickly obtained, the 24 hours quantity, the specific gravity, and the color.

In other words data that enable us to estimate the functional activity of the kidney. So long as the functional activity of the kidney is normal, the presence of albumen and casts neither justifies the diagnosis of Bright's disease, nor implies an unfavorable diagnosis.

It is good judgment to emphasize the value of arterial tension. In the diagnosis of chronic interstitial nephritis in the early stages, when high arterial tension is one of the first symptoms and one that remains constant throughout the whole course of the affection, it serves to diagnose chronic interstitial nephritis from extra renal albuminuria and other conditions that may be mistaken for nephritis.

Osler says: Of all indications, that offered by the pulse is most important. He claims that renal albuminuria as proved by the presence of albumen and casts, is much more common in adult, quite apart from Bright's disease or any obvious source of renal irritation than is generally supposed. Though it cannot be regarded as yet, as absolutely proved, it is highly probable that joint trace of albumen and hyaline casts and finely granular casts of small diameter are often, especially in those past 50 years of age, of little or no practical importance.

Cabot, a credited authority on the subject, says the attempt to establish the anatomical condition of the kidney by measurement of albumen and the search for casts, is fallacious in the extreme.

How often do we find a chronic nephritis in apparent health when an examination for life insurance reveals a state of health hitherto unsuspected. And yet we know that heavy heart action and arterial hypertension has long existed and preceeded the nephritic changes.

Often the occulist discovers an albuminuric retinitis, the first recognized evidence of chronic nephritis.

Many able men claim that the high blood pressure is due to a form of auto-intoxication.

Osler, says diatetic influences are at work in many cases; others, that an excessive use of meat is injurious, as it increases the material out of which uric acid is formed.

Emerson, in reporting the study of 1,000 cases of nephritis in John's Hopkins Hospital, mentions the common occurance of uric acid casts and casts of all kinds incrusted with urates.

In many cases the disease is directly attributable to a certain autogenous and exogenous intoxication, of which the most important are: alcohol, lead and uric acid, and the metabolic products associated with gout.

Seven of Emerson's cases reported from John's Hopkins proved to be

extreme passive congestion of the kidney, mostly from heart trouble, in which a clinical diagnosis of nephritis had been made.

In eight cases a microscopical study of kidney tissue exhibited no evidence of nephritis.

With experiences like these and many other disturbing facts says Metzler, we cannot wonder that a spirit of distrust is gradually pervading the medical literature both here and abroad against the reliance upon urinary examinations, especially against the over estimation of the diagnostic value of albumen and casts.

This paper could be drawn out indefinitely, citing authorities of note as to the value or non-value of urinary findings, but in all the cases that I have treated and finally lost I have always found high blood pressure. I recall two recent cases. In one the albumen and casts were misleading as to the serious condition of the patient. The other was truly alarming, if we prognosed by the amount of casts and albumen found, and yet this case lived months longer than the former. In both of them high tension was present all the time. Eliminative treatment was effectual to a great extent in one, and apparently negative in the other, and I am sure that the life of the former case was prolonged at least two years by the success of the treatment, combined with a diet strictly adhered to.

I avoid all drugs which increase the blood pressure and try to give those which would flush the emunctories with the least irritation to the kidneys.

THE DIAGNOSIS OF TYPHOID FEVER.*

(By D. B. Frontis, M. D., Ridge Springs, S. C.)

There is certainly no disease of such frequency and of such grave import, in which an early positive diagnosis is so difficult to make. The importance to the physician to settle this matter in his own mind, in order that he may direct his treatment more intelligently, take proper steps to prevent spread of the infection, and satisfy the apprehensions of relatives and friends has been felt by very practitioner.

Malaise. We will first consider the clinical picture. Usually there is a history of malaise of from five to fourteen days duration, with imparied appetite, loss of energy, headache, aching in lower limbs, occasionally in back, loss of or restlessness in sleep. Less commonly the onset of the disease is sudden with repeated chilliness, sometimes a pronounced chill followed by moderate fever. In a fair per cent of cases, the initial chill is followed by high fever, which gradually declines for two or three days, then advances day by day giving the temperature curve that is classical of typhoid.

Tongue. The appearance of the tongue at first is sticky, moist, with a grey, greyish yellow, or greyish brown coating. Towards close of first week

*Read before the meeting of the Third Councilor District Medical Association, held at Greenwood, S. C., November, 1909.

tongue becomes dryer with red edge on margin. Gradually the coating on dorsum disappears until entire tongue looks red with papillae very prominent. A sharp pointed tip, accompanied by tremor when protruded is very suggestive.

Secretions. Bowels are usually constipated. Text books of ten to twenty-five years ago invariably spoke of early diarrhoea, but later writers assert that constipation is more usual, and this has certainly been the observation of the writer. Not before middle of second week do the bowels show tendency to laxness, except under medication. When loose, stools are of an ochre-yellow color with disposition to separate into two layers, semi-solids and liquids. Urine at first high colored and scanty, but more copious in second week. Skin is dry, and on palms yellowish. There is increase of bronchial secretion with slight cough, disappearing in second week. There is slight tonsilitis and praringitis, but not sufficient to cause noticeable discomfort. Nasal mucous membrane swollen and red very early in attack and often accompanied with epistaxis. This is a very valuable sign of typhoid, especially when recurrent, and it usually occurs early.

Palpation. Palpation usually shows tenderness in ileoceal region. Gurgling is often present here but may be misleading as it is almost always present after taking salines. Tympanites may be evident at close of first week and is usually a marked sign in the second week in grave cases. In latter part of first and early in second week the spleen may be found enlarged. Some writers give this a very prominent place in the symptomatology but the enlargement is much less than in profound malaria. In differentiating, the spleen in malaria is generally larger and hard to the touch, while in typhoid enlargement is slight, and soft or spongy to the touch.

Mental Condition. The mental condition in a typical case of typhoid is very marked. The patient is listless and apathetic, usually preferring to be left alone. Occasionally the patient is very nervous and restless but even then there is a certain amount of mental apathy. Rarely there may be transient acute mania. Slowness in the formation and expression of ideas is often very marked.. The writer has repeatedly made a diagnosis of typhoid from this symptom, when other symptoms were not sufficiently pronounced to justify it. Coincident with this mental condition is the slowness with which voluntary movements are made, such as extrusion of the tongue or any movement of hand, arm or limb when requested. These are valuable points when drug narcosis and meningitis are excluded.

Rose Spots. During latter part of last week to middle of second an eruption of peculiar small rose spots appear on abdomen, back and chest. This eruption is pale red to bright pink in color, rounded discreet and slightly raised above surface. On pressure the color disappears but redevelops when pressure is removed. The number of these rose spots may be less than half a dozen or may be numerous. They occur in from 80 to 90 per cent of cases. Some recent writers deny their specific relation to typhoid, nevertheless they remain an important sign.

Pulse. At first the pulse is apt to be slow, not in proportion to temperapulse is apt to be slow, not in proportion to temperature. It is often diture. It is often dicrotic. Andrews finds this so frequent that he emphasizes it as a dagnostic point. In the writer's experience it has not been common. Later in the disease the pulse becomes weak and rapid.

Temperature. The peculiar temperature curve in typhoid is very marked. A gradual rise from day to day to end of second week, then in favorable cases declining by lysis. Afternoon temperature one and a half to two degrees higher than early morning. Practically as we meet typhoid here there are so many variations in the typhoid curve to the middle of second week, that we must beware of excluding the disease from lack of it.

Hemorrhage. A hemorrhage may occur toward close of first week and is usually diagnostic.

Perforation. Perforation usually occurs so late in disease as not to be a factor in diagnosis, but the writer had a case when this developed on third day after taking to bed and the fourth day after the first known presence of fever.

Negative Symptoms. The absence of certain symptoms help materially in making an early diagnosis of typhoid. For example there may be nausea but rarely vomiting. Profuse perspiration is never present in early stage of typhoid unless produced by medication. Herpes labialis, coryza, conjunctivitis, and jaundice are absent. With us typhoid must be differentiated from malaria, tuberculosis, the febriculea, and septiceamia.

Laboratory Diagnosis. The Widal reaction is now universally recognized as a reliable diagnosis test of typhoid, positive reaction is considered diagnostic but negative of little value. When negative, test should be repeated until doubt is removed. This test is now supplied in a practical form by manufacturers of biological products and reliable results can be gotten by any physician who is painstaking and accurate. Thanks to the wisdom and philanthropy of our State Board of Health, this test will be made gratis for any physician of the State who will send blood smears to our State Bacteriologist, Dr. Coward, of Columbia.

Another most valuable laboratory method is to make cultures of B. Typhosus from the blood of the patient, but the technique is complicated and need only be used in the more obscure cases. A leukocyte count may be of use in some cases as leukocytosis is never present in uncomplicated typhoid. No attempt has been made in this paper to cover the entire ground but only to touch what the writer conceives to be the salient points in the diagnosis of typhoid. Laboratory diagnosis when carried out under perfect technique gives the most reliable results.

In conclusion, the diagnosis of typhoid will rest on the care of the physician in making a minute and painstaking examination of the patient, including inquiry as to possibility of infection from known sources, and the ability to sift the history. The diagnosis can rarely be made from one symptom but from the general ensemble, carefully considered. When this can be supplemented by a laboratory test it should be rare that a positive diagnosis should fail to be made by beginning of second week.

PREVENTION OF TYPHOID FEVER.*

(John Lyon, M. D., Greenwood, S. C.)

We are accustomed to speak of typhoid fever as a water-borne disease, forgetting that the actual source is in man and that water only carries the infection from one host to another. We all know this to be a fact, yet how indifferently have we carried it into actual practice. We have very properly taught the layman that the infection of scarlet fever, diphtheria or smallpox may contaminate clothing, bedding, etc., and later become a source of contagion. Compare this with our attitude in typhoid fever. Not one typhoid fever patient in a hundred knows that he contracted the disease by swallowing the excreta of some other typhoid fever case.

I believe that when the general public and I may add the physician, realizes the great importance of killing every typhoid bacillus as it leaves its host, we will have accomplished a great deal in the prevention of typhoid fever. Indeed, until this fact is properly appreciated by the medical profession and public generally the prevention of this disease is more or less hopeless.

The management of a case of typhoid fever should be similar to that of the more infectious diseases. Every case should be isolated and the room prepared as for smallpox or scarlet fever. All unnecessary articles of furniture should be removed, separate eating and drinking utensils povided and the family and visitors kept out of the room. Typhoid fever is frequently referred to as a rural disease. Many of us who do country practice have seen it spread from one family to another without being able to explain the contagion by the presence of infected water. A sick-room crowded with visitors, all of whom come more or less in intimate contact with the patient, is a familiar scene. I believe this contact of the well person with the patient, more than anything else, is responsible for the spread of the disease in the country.

When the patient is not able to hire a good nurse, the physician should select from the neighbors and family a limited number to act as nurses and they should be thoroughly taught the sources of contagion and their proper disinfection.

It would seem unnecessary to caution the physician against carrying the infection. Yet a lazy, careless physician may be a distributing agent.

It is, above everything else, most important that the nurse should understand the sources of infection and how to disinfect them. The urine, sputum and vomitus should be as thoroughly disinfected as the stools. The most effective method of disinfection is by boiling or burning, but in ordinary practice this is difficult to accomplish and we must rely upon chemical disinfectants. Bichloride of mercury is unreliable, especially so for

*Read before the meeting of the Third Councilor District Medical Association, held at Greenwood, S. C., November, 1909.

the faeces, and should not be depended upon. Milk of lime is said to be effective but is difficult to make and keep fresh. The ordinary commercial lime is more or less useless. Carbolic acid in a one to twenty solution is effective if used in sufficient quantity. A solution of cresol, similar to creolin, has the advantage of being cheap and is probably better than carbolic acid. It's cost is about 80 cents to $1.00 per gallon when bought by the barrel. Every board of health should keep a supply of this on hand for free distribution. The fact that it is free greatly encourages its use.

About two ounces of this cresol solution to one gallon of water should be used and two parts of this solution to one part of faeces or urine. It should be thoroughly mixed and all foecal masses broken up and allowed to stand for three or four hours. The administration of 15 grains of urotropin three times a day for two days in each week is said to be of value in preventing the occurrence of bacilli in the urine.

The clothing and bed linen necessarily becomes more or less contaminated and should be allowed to soak in this solution for several hours or better boiled. Bed pans, syringes, thermometers, etc., should be carefully disinfected. The bath water should be disinfected by using the cresol solution.

Every precaution should be taken against flies getting into the room.

Disinfection should be kept up till the patient is well and the room disinfected as in other infectious diseases.

Owing to the fact that proper disinfection and isolation has been neglected the whole country is more or less infected. There are also a certain number of mild cases of typhoid fever which are not recognized and a small per cent of all cases are bacilli carriers for a considerable time after they have recovered from the disease. We may hope for a law, some day, which will give a supervision of all bacilli carriers. He should certainly be restricted from employment on milk farms, in bakeries, groceries, hotels, restaurants, etc.

There is some evidence that household insects may transmit typhoid fever but the greatest danger is generally conceded to be from contact, food and flies.

The danger from contact can be avoided by isolation.

Of the foods which transmit the disease, water and milk are the principal ones. Butter, ice, oysters, fruit and vegetables also may carry the infection.

The efficacy of a properly constructed filtration system, provided it is in charge of a competent bacteriologist, cannot be denied. However, the practice of using infected water, depending upon filtration to purify it, is more or less unsafe.

Every town or city should make an effort to get a clean water supply and it should be patrolled sufficiently to prevent infection.

In the country and small towns the water supply comes from wells which may become infected by surface drainage or by drawing the bucket with a rope or chain, the hands being practically washed in the well. The practice of building a dairy by the side of the well, which frequently be-

comes infested with rats also adds to the danger of infection. The inevitably filthy hog pen may contaminate the well by surface drainage but I believe the greatest danger in the hog pen is from flies. The hog pen seems to furnish an ideal culture medium for the typhoid bacillus.

Milk is usually infected by water or flies and becomes more dangerous owing to the fact that the bacilli multiply and flourish in it. Fruit, vegetables, etc., are infected in the same manner. Vegetables may also become infected by using human excreta as a fertilizer.

The house fly is an important factor in disseminating the typhoid bacilli. The sad experience of the United States army in the Spanish-American war should convince anyone of this fact. Their breeding places should be restricted as much as possible and where privies are used they should be so constructed as to prevent flies from feeding upon the excreta. They may be kept out of the house in a measure by the use of screens, fly-paper, etc.

There is another prophylactic measure which gives some hope of success and that is specific inoculation or vaccination. The following results were obtained by Wright in the British army; of 1758 inoculated 8 per cent. died, of 10,980 uninoculated 16 per cent. died. The only disadvantage of the procedure seems to be that inoculation is followed by a short period of hypersusceptibility to infection. Increased immunity seems to last from one to three years. This promises to be of value in military service and may also be of value in civil life in the presence of an epidemic, where the carriers of infection cannot be found or eliminated.

In conclusion I wish to emphasize the fact that the problem of effectively guarding against every carrier of typhoid bacilli is an immense one and more or less hopeless. But we can accomplish a great deal by isolation and thorough disinfection.

TEMPERATURE IN TYPHOID FEVER.*

(By G. A. Neuffer, M. D., Abbeville, S. C.)

1st. Peculiarities of temperature;
2nd. Indications derived from temperature;
3rd. Treatment of temperature.

First. Hyperpyrexia—temperature above 106 is not very common in typhoid, except just before death when the thermometer has been known to register 109.5 When the temperature rises above 105. Hyperpyrexia exists.

Apyretic-Typhoid without temperature claimed to exist by some authorities. Anders says they occur, but are of great rarity. Osler has no personal knowledge of such cases.

*Read before the meeting of the Third Councilor District Medical Association, held at Greenwood, S. C., November, 1909.

In the onset we have the step-like temperature, in other words during the stage of development (the first four or five days) the temperature usually rises in "step-ladder" fashion. The evening exacerbation is on each day from a degree and a half to two degrees higher than on the preceeding day and the same is true of the morning remissions. The morning remissions are from one half to one degree lower than the preceeding evening registers. When the fastigium is reached, which is usually about the end of the first week, the evening temperature may be 103 to 105, and is usually thus maintained with very slight morning remissions.

The tide-like character of the fever curve seen in the initial period is sometimes absent, occasionally we have an inverse curve, the morning temperature being higher than the evening. In ordinary cases the maximum temperature occurs between three and six o'clock in the afternoon, and the minimum between four and eight in the morning. In typhoid cases the end of the fastigium marks the beginning of the last stage (that of defervescence) and during this period the temperature falls by lysis. In favorable cases this begins about the twenty-first day of the disease. The decline is like the ascent by degrees, and we have a more or less regular step-like line of descent. Sometimes the temperature continues to the fourth, or sixth, or even the eighth week before defervescence begins. From this general rule there are two notable exceptions. 1st. From the beginning of the period of defervescence the morning remission may strike the normal point, while the evening exacerbations become less and less marked until they also touch normal. 2nd. In comparatively rare instances the morning temperature shows a deeper remission on each successive day, while the evening temperature remains high for several days, when it also declines. In the severe and protracted forms of typhoid fever there occurs between the second stage (fastigium) and the third stage (defervescence) another, to which Wunderlich has given the name of the "ambiguous period." This lasts from a few days to a week or more, and is characterized by a striking diurnal range of temperature, with marked irregularities. It is probable that it is sometimes produced by an auto-intoxication. A sudden elevation of temperature is seen in those cases that begin with a severe rigor.

There is also a class of cases in which throughout the greater part of their course, the temperature is distinctly intermittent or remittent, and careful blood examination fails to disclose the plasmodium malarial. The same characteristic marks the temperature-curve in those rare instances of typhoid fever which occur in subjects previously infected with malaria. These two classes of cases run a favorable course as a rule.

Post-typhoid Elevation of Temperature. After both the evening and morning temperatures have become normal, fresh temporary elevations frequently appear. They are as a rule unassociated with any other symptoms, and at the end of a few days the temperature falls rapidly to normal. These are called recrudescences and are to be distinguished from true typhoid relapses. They are probably produced in various ways—by

errors in diet, constipation, mental emotion, excitement, and in some cases the fever seems to be really a nervous phenomena.

Certain local sequelae may cause post-typhoid temperature, such as abscess, periostitis, etc.

Rarely during convalescence a sudden and marked elevation of temperature, accompanied or not by rigor, occurs, but it is usually of short duration and seldom is of serious import.

Another physician in consultation with the writer, held the opinion that chills in a typhoid fever patient meant that the case always ended fatally, but my experience proves this to be a mistake.

Second. Indications derived from the temperature. When the temperature in a case of typhoid fever, runs the typical course, going up as the fastigium is reached in the classic step-ladder manner, and never going higher than 102 Fahrenheit; we will be safe in giving a favorable prognosis, for nearly all such cases under proper care recover. Any irregularity in the temperature, or a sudden rise as well as an abrupt fall, demand our immediate attention and most careful study; so as to find and remove the cause.

When a sudden deep drop in the temperature occurs, it may indicate one of several conditions. Intestinal hemorrhage almost invariably produces a sudden and sometimes a great fall of temperature, sometimes as much as ten degrees (Osler) and hence a decline of this nature during the latter part of the second and the third week of the disease suggests that hemorrhage has probably taken place. The occurrence of peritonitis is marked by a sudden and considerable fall of temperature. In the female, abortion or premature delivery occurring in the course of typhoid fever produces a decided lowering of the temperature.

Collapse of the circulation sometimes occurs with a notable remission of temperature—an ominous association of events.

Perforation of the intestine is very often first indicated by a sudden and decided drop in temperature, with an acute pain in the abdomen quickly followed by symptoms of collapse, and the fact that diffuse peritonitis following perforation, may develop insidiously must be recollected.

In some cases during convalescence a sub-normal temperature for the entire twenty-four hours may persist for days. This is of no importance save that it indicates that the patient is feeble and needs good feeding and fresh air. The stage of defervescence is sometimes much prolonged, though most frequently there is simply a slight evening elevation, the morning temperature being normal. The causes of retarded decline are for most part obscure. Many of them are probably due to a mild grade of auto-intoxication, sometimes suppuration in the mesenteric glands, sluggish typhoid ulcers, which refuse to heal promptly, and are due to the now well known post-typhoid anemia are also some of the causes of the slow decline of the temperature.

A sudden and unexpected rise in the temperature leads us to look for an inflammatory process somewhere, and I would suggest that under the circumstances the chest be given a thorough examination; for pneumonia

is a more frequent complication of typhoid fever than is generally thought, and it is a very fatal one.

Some of the other local inflammations which give rise to otherwise unexplained high temperature are abscesses in any part of the body, periostitis, orchitis and parotitis.

Third. Treatment of temperature. As long as the temperature in a case of typhoid fever does not exceed 102 degrees Fahrenheit, no especial antipyretic treatment is indicated. This idea is based on the conception that fever is a salutary reaction on the part of the organism, but that like all such processes in nature, the reaction may be excessive and overshoot the mark. It is the physician's task therefore to watch over the fever, doing nothing if all is going well, but ready at any moment to intervene to keep the salutary reaction within due bounds. This means that if the temperature remains persistently above 102 degrees Fahrenheit, we must for the good of our patient adopt such antipyretic measures as will best control the temperature with the least risk of danger to our patient.

The use of tepid, cool and cold water I believe to be the most efficient as well as the safest means of controling the temperature. There are various methods of applying cold water to typhoid fever patients—the Brand method is the one usually adopted in hospitals; in this method when the temperature goes above 102 F. the patient is lifted into a bath tub with the water at 70 F. and kept there for 15 minutes, he is removed to his bed, gently wiped off and covered with a blanket. If reaction is retarded he is given about one ounce of whiskey, and gentle friction applied to the back and extremities. When the cold baths are badly borne, or are unproductive of good, warm baths are substituted, that is the temperature of the water is raised. Other methods of applying water are to rub the patient with tepid, cool, cold or ice water, or rub with ice, according to the resistance shown by the temperature.

The use of water to control the temperature has this drawback, in that it requires a nurse or some one of intelligence and persistency to use it to advantage in typhoid fever cases, and in the great majority of our cases we are unable to secure a suitable person to carry out our hydrotherapy. Then we of necessity must have recourse to the much abused but ever useful "fever powders" or coal tar preparations, and right here I would like to have a hand primary of this convention, and let every one who can say that he has never given a dose of a coal tar derivative hold up his hand. (Of 32 present, only one hand up). Of these preparations I only use three, and consider them safe and efficient in the order named: Phenacetine, Actetanilid, (preferably the compound) and Antifebrin.

In using "fever powders" I can say that personally I have never seen or had in my practice any bad results from their use; very rarely I have seen them produce cyanosis in patients who I believe have an idiosyncracy against them. I would advise their use in moderate doses, repeated as found necessary from 2 1-2 to 5 grs. to an adult.

I will close this paper with a digression, and make this statement, that the rarity of convulsions or spasms in children these days is due to

the fact that mothers have learned how to use "fever powders." I append the report of an investigation made as to the use of coal tar derivatives:

The investigation was conducted along two lines: (1) An inquiry was addressed to physicians in the United States with regard to their personal experience with these drugs in the practice of their profession. Nearly a thousand circular letters, each containing eighteen questions, were sent out, and 400 replies were received. (2) A study was made of the cases of poisoning recorded in medical literature.

that persons poisoned by acetanilid from 1884 to 1907 were 297; deaths, 13; habitual use, 32. Antipyrin poisoning, 488; deaths, 170. Phenacetin

Result of Investigation. The results obtained in this investigation show poisoning, 70; deaths, 3; habitual use, 1.

Cases reported by four hundred physicians, 1908.

Acetanilid poisoning, 614; deaths, 17; habitual use, 112. Antipyrin poisoning, 105; deaths, 5; habitual use, 7. Phenacetin poisoning 95; deaths, 7; habitual use, 17.

Thirty per cent. of the physicians stated that they use acetanilid frequently or moderately; 28 per cent. do not use it at all, and 25 per cent. use it rarely. Thirty-six per cent. use phenacetin frequently or moderately, 23 per cent do not use it, and 21 per cent use it rarely. Only 5 per cent. use antipyrin frequently or moderately, 52 per cent. do not use it, and 25 per cent. use it rarely.

ANTISEPTIC AND ELIMINATIVE TREATMENT OF TYPHOID FEVER.*

(By Dr. W. G. Houseal, Newberry, S. C.)

Typhoid fever is caused by the bacillus typhosus, also called the bacillus of Eberth. Almost invariably the bacillus gains access to the body through the mouth, stomach and intestines, sometimes by inhalation of dust through the lungs. The primary and most evident lesions are found in the intestines, in Peyer's patches and the solitary glands. Impressed by this method of access to the body and with the intestinal lesions, investigators have made laudable efforts to destroy the typhoid bacilli and their toxic products in the intestinal canal. It is also designed by this treatment to arrest fermentation and decomposition of intestinal contents and check the activity of the ordinary harmless bacteria always found in the intestines in health, which become virulent in consequence of the presence of typhoid bacilli.

The bacilli of typhoid fever cannot be destroyed by antiseptic remedies. They are not found chiefly in the intestines, often not being found there until the second week of the disease. They are found in the blood as

*Read before the meeting of the Third Councilor District Medical Association, held at Greenwood, S. C., November, 1909.

early as the fourth day and multiply in the intestinal walls, in the spleen, in the mesenteric glands and even in the marrow of the bones—in fact in every organ of the body.

Many antiseptic remedies have been used and many observers report benefit from their use. Among many remedies suggested, the following may be mentioned: Acetozone, beta-napthol, thymol, carbolic acid and tr. iodine, chlorine water, sulpho carbolate of zinc, salol, calomel, turpentine and resorcin.

Acetozone, thirty grains is dissolved in one-half gallon of water, flavored with some one of the volatile oils, this quantity to be given to the patient in one to two days. This has been much used and favorably reported upon.

Beta-napthol is regarded as a powerful germicide. Bouchard combined salicylate of bismuth with it in diarrhoea and salicylate of magnesia in constipation. It is given in doses of 5 to 10 grains t. i. d., in capsules or tablets. Under the use of this drug favorable results have been noted. Foul stools lose their offensive odor, tympanites is lessened, convalescence is more rapidly established and tendency to complications is lessened.

Thymol is regarded as an efficient antiseptic, and is given in daily doses of 20 to 40 grains.

Carbolic acid and tr. iodine, one part of the former to two of the latter has been often used. The dose is from one to three drops in water every three to six hours. This combination cannot exert much effect upon the intestinal canal because it is rapidly absorbed from the stomach. It has a sedative effect upon the gastric mucous membrane and is very useful in cases in which nausea and vomiting are present.

Chlorine water in recent years has been strongly advocated by Burney Yeo. The chloric water is made as follows: "Into a twelve ounce bottle put thirty grains of powdered chlorate of potash and pour on it forty minims of strong hydro chloric acid. Chlorine gas is at once rapidly liberated. Fit a cork into the mouth of the bottle and keep it closed until it has become filled with the greenish yellow gas. Then pour water into the bottle little by little, closing the bottle well and shaking with each addition, until the bottle is filled." To twelve ounces of this solution Yeo added 24 to 30 grains of quinine and an ounce of syrup of orange peel. The dose is one ounce every three or four hours according to the severity of the case Under this treatment, Yeo claims the odor of evacuations subsides in 24 hours, also that temperature is lessened, the duration of the disease shortened, the power of assimulating food increased and physicial strength maintained.

Brannan, of New York, says this treatment exerts a favorable influence upon the disease but the results are not so far reaching as Yeo claims.

Another antiseptic is sulpho-carbolate of zinc, or sulpho-carbolates of zinc, lime and soda, given in pill form three or four times a day, and exerts a favorable influence.

Anders, of Philadelphia, employs salol exclusively, he says with uni-

formly good results—"nothing in his hands controling meteorism so well." The dose is two to three grains, in capsules, every three hours. Anders usually combines quinine with it in doses of one to two grains.

Calomel is one of the most efficient drugs employed in typhoid fever for its antiseptic and eliminative effects. It is given very generally in the beginning of the disease, and some have employed it in small doses throughout the disease.

Turpentine is an old time remedy for antisepsis. It is best given in emulsion, in a dose of 10 to 20 drops, three or four times a day. Hare says he prefers this drug for intestinal antisepsis. It prevents tympanites, and is the best drug for its relief, at the same time it is given internally it is used externally in the form of turpentine stupes. It is also one of the best drugs for the prevention and relief of intestinal hemorrhage.

Resorcin. Dr. William I. Messick, of Baltimore, says that in an experience of fourteen years he has never had a case of typhoid fever with continued frequent fecal movements. When he recognizes that he is dealing with typhoid fever with frequent stools, he puts his patients upon resorcin, 5 grain doses every four hours, and in a few days the patient is constipated. Dr. Nathan Winslow, of Baltimore, has used the remedy for diarrhoea in typhoid fever and finds that it does the work. Resorcin controls diarrhoea by inhibiting fermentation of the contents of the intestinal canal.

Antiseptic treatment combined with eliminative treatment have for their effect not only the destruction of the bacilli and their toxins in the intestinal canal, if this be possible, but also the prevention of fermentation, decomposition and auto-intoxication by antisepsis and the prompt removal from the bowel of toxic products.

The removal of such products is effected by thorough drainage of the intestinal canal by purgatives, laxitives and enemata. Along with this treatment it is recommended that large quantities of pure water be taken to keep the fluids of the body up to normal standards and replace those lost by purgation.

In recent years Woodbridge, of Cleveland, and Thistle, of Toronto, have been the prominent advocates of antiseptics and purgativs in the treatment of enteric fever. The Woodbridge treatment was as follows: "At the beginning of the disease without waiting for a positive diagnosis, he gave a small tablet, containing:: Res. Podophyl gr. 1-960; Calomel gr. 1-16; Guaiacol carb gr. 1-16; Menthol gr. 1-16; Thymol gr. 1-16; Eucalyptol, (q. s.)

"This was given every fifteen minutes for first twenty-four hours, and in larger doses if necessary, during the second twenty-four hours, until this and the succeeding twenty-four hours not less than five or six free evacuations of the bowels are secured during each of these periods." On the third and fourth day the same formula was given, except the guaiacol was increased to one-fourth grain. These formulae were given freely at first, then gradually decreasing the size and frequency of the dose so as to allow the bowel movements to become less and less frequent, until the

temperature dropped to normal, when the movements were reduced to one or two each day. On the fifth day the following capsule was given: Guaiacol carbonate gr. iii; Thymol gr. i; Menthol gr. ss; Eucalyptol gr. v.

One capsule every three or four hours alternating with the tablets. During the whole course of treatment the patients must take large draughts of pure water with each dose of medicine. Woodbridge claimed that with this treatment, if begun early, the disease could be aborted, and exhibited charts showing normal temperature on the tenth day of the disease.

Thistle's treatment was much less complicated. The outline of his treatment is as follows: Calomel in daily doses of one-half gr. every hour until three grains are taken, then followed by epsom or rochelle salts in half ounce dose in three nours. The object being to cause from three to five evacuations in twenty-four hours. Salol, in five to ten grain doses. was given for antiseptic effect every three hours. Eight ounces of water was given with each dose of salol to compensate for withdrawal of fluid from the intestinal canal as well as to wash out through the kidneys the typhoid poison.

Thistle in one of his papers reported one hundred and seventy-two cases treated by himself and associates in Toronto according to this method with only five deaths, or a mortality of 3 per cent.

In order to test the value of antiseptic and eliminative treatment, Brannan, of Columbia University, N. Y., employed the treatment in 1897 and 1898, in a considerable number of cases. He also collected the records of a number of cases treated in hospitals. He obtained full records, charts and histories, of 78 cases. Fifty-two were treated by the Woodbridge method, 26 by Thistle's method. Fourteen of the fifty-two cases were treated in the New York hospitals, four cases under Woodbridge himself, the others under such men as Dr. Chas. L. Dana and Dr. H. P. Loomis. The remaining 38 cases were treated by Dr. Woodbridge in the United States Government Hospital, at Fort Meyer, Va. Time will not allow me to go into details of the results of this treatment. About the same results were obtained as with the old plan of expectant treatment and with the Brand method and other forms of hydrotherapy.

The group of twenty-six cases were treated by Brannan, himself, in the autumn of 1898, with calomel, salines and salol, according to Thistle. The results were about the same as other cases treated in the hospitals in the ordinary way.

What, then, is the value of antiseptic and eliminative treatments?

Brannan in giving his impression of the treatment says that it compares well as far as mortality is concerned, with the ordinary treatment. "The mortality in the 78 cases mentioned above being only 7 per cent." The 72 who recovered had no intestinal hemorrhage indicates strongly the harmlessness of active purgation in typhoid fever."

Tympanites called for no active treatment. The patient, in a word, did well, much better than under the simple expectant treatment and fully

as well as under the Brand method, as he had seen it applied in the hospitals in this country."

We cannot expect to destroy the typhoid bacilli by administration of antiseptic remedies, and so benefit the patient. As has already been said, the bacilli are not found in the intestinal canal in the early stages of the disease, and in the latter stages they are found distributed over the whole body. However, by these remedies it is possible to combat intestinal fermentation, as shown by tympanites and foul smelling stools, by checking the growth of non-specific bacteria, which multiply in the bowel in the course of this disease.

In this disease hepatic secretion is lessened and by antiseptic remedies toxic material is prevented from being generated in excess, and auto-intoxication checked by prompt removal of toxic material from the bowel.

In the last few years I have kept antiseptic and eliminative treatment well in mind, and have noted decided benefit from their use. In the first week of the disease, I believe in calomel followed by a saline laxative. I do not use calomel after the first week. In the second and third weeks I do not believe in promoting too great peristalsis. However, I have seen excellent results from an occasional dose, say every three or four days, of castor oil or saline laxative, when indicated. In the fourth week, when fever is prolonged, good results are obtained by free intestinal drainage. Often when peristalsis should be kept in abeyance, on account of fear of hemorrhage or perforation, or when constipation is present, and it takes too strong a dose of purgative to relieve it—when offending material is necessary to be removed under such conditions an enema is indicated.

The colon in typhoid fever is in a catarrhal state, and in 25 per cent. of all cases, is ulcerated. I believe I have seen great harm done by routine daily high colon irrigation in typhoid fever, with a stiff rubber tube. An enema should be given in this disease most carefully with a soft No. XV catheter, and not oftener than every third or fourth day.

The antiseptic I prefer is salol in two and one-half to three grains doses, every three hours. If diarrhoea is present, I combine it with gr. v of bismuth subgallate or use resorcin.

In conclusion, let me say that *in typhoid fever always use antiseptic treatment and always secure free intestinal drainage.*

DIET IN TYPHOID FEVER.*

(By R. E. Hughes, M. D., Laurens, S. C.)

The most important disease today, to the public and profession, is typhoid fever. And in the absence of a specific, the diet plays the main role in its management, and when honored by you for views on this phase

*Read before the meeting of the Third Councilor District Medical Association, held at Greenwood, S. C., November, 1909.

of the symposium I was very much gratified, having realized for some years the necessity for a reform, hoping some man would come forward with a scientific and established basis upon which to work, but the giving of important truths is usually by the one idea man. Even though criticised as the monomaniac, he is the one, who riding a hobby along the main channel of his chosen field runs down and finally lassoes a fact. We have but to recall the names of Harvey, Jenner, Lister and Sims, etc., in confirmation of such a statement, not to mention a score of others today who are laboring most zealously in the various branches of the profession. Every department of medicine is progressing; prophylaxis is the modern trend; diagnosis is made with greater accuracy; treatment founded on better pathology—more satisfactory and withal being a day of specialism. Good work is being done. In spite of all, though, it seems Dr. Lyons—prophylaxis has failed once. Dr. Frontis diagnoses typhoid fever. Dr. Neuffer is cutting at the high temperature. Dr. Houseal takes it all with a sprinkling of salt, while Dr. Mayer in consultation, it would seem, calls for more nourishment, and appoints me caterer. Therefore, time being limited, let us get to the menu.

In the beginning, let me say no ultra scientific thesis will be attempted, but rather a plain practical discussion of the most important reforms in typhoid fever diet, as well as some of the short comings of the past method. This subject is attracting very general attention. Hare, Thayer, Forcheimer, Sattuck, Barr and many others constantly come forward with good practical views—the result of their observations, Shattuck and Hare especially. The subject boiled down, then leaves but two questions to be asked.

1st. Shall the typhoid patient be given food enough to meet energy requirements?

2nd. What shall the food be?

Answering the first, as to the amount, we must say—yes. Typhoid, though an acute trouble, covers over a period of from one to three months, being attended by very rapid waste, it is just as important to feed it liberally as tuberculosis, care, of course, being taken to watch stools, digestion and intestinal complications. Statistics are boring and pliable, but there is no doubt of the very great preponderance of evidence clinically and experimentally to establish this fact, and the experience of our most observing students is that pathalogical and clinical phenomena in severe cases are directly traceable to auto-intoxication from excessive body waste. Should not this waste be met? We know healthy laboratory animals develop a better immune serum than those not robust. A starvation diet in typhoid was the accepted practice for centuries, and included deprivation of water. Even the old darkey knew "to stuff a cold and starve a fever." We also know that coincidentally with the adoption of water as nature's antipyretic came its liberal use internally, and a marked reduction in mortality. We further know now to give water freely, and that acetozone, so extolled a few years ago, had but one virtue and that was the enormous amount of water given with it. In a personal letter from Dr. Hare, after

dwelling upon the importance of diet in typhoid cases, says: "Practically without a single exception all my patients are adequately and freely fed, and so are enabled to combat their infection and arrive at the stage of convalescence without much emaciation."

As to how much is necessary for each patient, of course, no hard and fixed rule can be made any more than in health. For that particular patient's requirements, suffice it to say, each one is a law unto himself, and it is a duty we neglect in not studying such details more. But, when we consider patient's weight, age, occupation, sex, digestive functions and general bodily vigor, we ought to reach very practical conclusions. We are too much afraid of ulceration and hemorrhage, and really it is not as formidable as that profound general toxeamia—the first representing a well fed patient, with bad local conditions—the second a starved one, almost moribund, with a systematic poisoning. But one drawback seems to arise in liberal feeding, and that will be our inability, after its adoption, upon learning of a sudden rise of temperature to say, "Oh! he has eaten too much." But in future we can say, "maybe he has gotten the wrong thing," and this brings us to our second question: What shall the patient eat?

Milk has long been the favorite. Flint in 1870 popularized it, but for the last ten (10) years it has gotten some hard jars and jams. They have hammered, shaken it and churned it until we have been almost tempted to discard it, but still it remains, even after being churned, very prominent, for buttermilk is getting better every day.

Fussell says: "The claim that milk as compared with solid food causes a good culture medium in the bowel is not well founded. The entire intestinal canal is swarming with all sorts of bacteria. It matters not. it seems to me, whether the food be taken as milk or more solid food. That which remains must provide the culture medium. There is no more refuse matter in the bowels after a diet of milk than after other diets." Adding, after many autopsies, he never found lower bowel overfull or containing a large number of curds, though these patients had used nothing but milk. So it appears that the best observers still regard milk variously modified as occupying a prominent place in typhoid fever. Its cheapness and availability, its palatability, its life sustaining qualities, all combine to offset those few objections against it, such as the culture medium fear and constipation. This latter condition I do not mean to minimize, and emphatically object to it when it offends, and, of course, discontinue it; but, while letting it occupy first place, we do not say the only place, and freely advocate egg albumin, lemonade, coca, coffee, tea, ice cream, soups (veal, beef, chicken, tomato, potatoe, oyster, mutton, pea, bean, squash) carefully strained and thickened with rice (powder) arrow-root, flour and barley, Horlick's food, beef juice, gruels, minced meat, scraped beef, toast, wine, jelly and apple-sauce, water any kind—all the time and freely—egg-nogg continuously at first, regularly toward crisis, and freely during convalescence. My exeprience does not justify the claim that the alcohol addictions ever start from its use in typhoid fever. Solids and semi-solids

should be given just as soon as possible to encourage mastication and insalivation. We recall that the very first steps in digestion is mastication and insalivation, and that the saliva is the medium of the sense of taste. Therefore, we often encourage a desire for food in these indifferent cases by allowing them to observe nature's first functions—prudently allowing some chewable food throughout the attack.

Conclusions. Feed the typhoid patient liberally, but carefully from the first. Encourage the ingestion of large quantities of water; use milk freely when suited, but allow other things. The list is large, and variety is the spice of life.

Imagine how you would feel with a wasting disease and having to swallow a tablespoonful of some pharmaceutical slops every few hours for two months, and trying to subsist on the assurance of its food value. Faith is a good thing, but if it is defined properly as a something hoped for but unseen, then it is a defective diet in typhoid, however handy it may be to the starved patient, who shakes off this mental coil.

THE BUSINESS SIDE OF MEDICINE.*

(By T. H. Dreher, M. D., St. Matthews, S. C.)

Since I received my first pair of boots as a little boy, born and bred to the soil of grand old Lexington, I have enjoyed few keener pleasures than the invitation to be with you on this splendid occasion.

I carried my first saddle bags, as you know, in and around the proud little capital city of old Saxe-Gotha, and I consider it a distinguished honor to be thus invited, by those who have known me, and of me, from a child, to return to your midst and talk to you today.

I know of no more opportune subject, at a more opportune time, to discuss, than "The Business Side of Medicine." No labor or scarifice has been spared which would develop and round out our noble profession. The knife of the scientific surgeon has penetrated the sacred precincts of almost every crevice of the human economy, and the sleepless physician has never faltered in his determination to storm the citadel of every foe to health. It is questionable whether there is any department of human activity, in the world, which has shown the same giant strides and marvelous development in the last quarter of a century. Certainly no learned profession has eclipsed her in this line.

This being the case, the question naturally arises: "Has the business feature kept pace with its development in other ways?"

We hear much about the princely incomes of many of our noted specialists, and there is every indication of prosperity among them, but what of the vast army of general practitioners? Are they, as a rule, doing more

*Read before the Lexington County Society, by invitation, at its annual meeting, October, 1909.

than keeping the howling wolves from their doors? What proportion of these are engaging in side lines in order to stimulate the pocket nerve and provide a comfortable support for self and family? Nobody looks for riches among our tribe but what percentage is really in the "Job Turkey" class, and why? There is an impression, more or less defined, among the laity, that physicians and especially country doctors, are sent among them as "Sisters of Mercy," to relieve the aches and pains of the community, as a sort of religious duty. We have been batted around like india rubber balls, so long, that it has become a part and parcel of the profession.

With hats on the tips of our fingers, we have humbly received the few crumbs thrown into our upturned palms, without cavil or protest. Many are too cowardly to make a stand for their just desserts. The sharp and exciting race of competition cowers them into abject submission. They are afraid the impression will go abroad that they are losing ground and being supplanted by others. We attribute neglible business methods in others, as merely an excessive surcharge of the milk of human kindness, which excites our sympathetic nerves and weakens our backbone. Would they take the "goods," if offered, and have you ever known one who failed to push his claims against the county, whether strong or weak? Carelessness and indifference in this matter will likely mean similar service. As a result, we fall into the beaten ruts. We lose ambition. It is a case of "poor pay, poor preach."

Why should we buy the best and latest books and the most essential and approved instruments for patients who do not appreciate their value. As a matter of fact, how can it be done? With no stimulant, but more or less doubtful promises and appreciation, we lie still in the dead professional eddy, or simply drift on the daily tide. Do you know of many more exacting callings than that of conscientious, general practice in the country and small towns? Then why should not the laborer be rewarded? Is there any more reason for it than elsewhere? The merchant collects his grocery bills from the poor, as well as the rich, or knows the reason why. His wares are no more necessary to life's sustenance than our pills, usually.

We are told, you know, in Biblical history that Nathan, being sick trusted not in the Lord, but called a physician and "Nathan was gathered unto his fathers."

The lawyer demands the cash or gilt edged collateral before he untangles the skein which enmeshes his client. But the physician who does not bestir himself from a warm couch, and brave the wintry midnight blasts, without reward, or hope of reward, is pronounced a brute and a disgrace to his profession. We should all do charity practice. Most physicians, do. I do mine, and plenty of it—in spite of what the public may think to the contrary. Most of it willingly. But I submit emphatically and unreservedly, that no class of people beneath the sun, (who are free moral agents) are more shamefully imposed upon than we are by so-called charity patients.

We are largely to blame. There is a notion abroad that the public

can pay a doctor, or not, as it sees fit and the public is about right. If Dr A. fails to turn up, why Dr. B. will be glad to get a whack at the real or imaginary pie.

I plead guilty to an increasing skepticism about the average charity patient's inability to pay his medical bills. Too many have no desire to do so and make no effort. They stand on "my honor sir" with the strictest nicety until the physician sends his bill, when they grow faint and weary and "with one accord begin to make excuse." Many gratify their depraved appetites, fish, hunt and loaf; take their vacation to the mountains and the sea coast; attend every picnic, fair and political frolic in all the country round; dress well, keep their families abreast of the latest fads and styles and in the teeth of it all will plead debts and poverty to the hard worked physician, and freely tumble upon the charity scrap heap. If pushed, they drop you, pat the charity doctor on the back and with oily words, remind him of the treasures laid up for him in a better world where moth and rust doth not corrupt nor thieves break through and steal. This is very like the groom who promised the minister to send the couple's children to his Sunday school as a matrimonial fee.

The attainment of the much coveted diploma from a first class medical college is no child's play any more. The apprentice who wishes to follow the path once nobly trod by Coke and Blackstone, can still sit at the feet of a more or less, true edition of a modern Gamaliel for a few months, in his office, and then hang his shingle beseechingly to the breeze, as a full fledged attorney-at-law. Not so with us. For four long years must we wrestle and agonize with "stiffs," and bones and dry theories, at heavy expense, before we can launch our frail barks upon the stormy sea of an exacting professional life. If there are no substantial rewards what boots it for us to do it? No wonder so many throw up the sponge in disgust and seek more serene and profitable employments. Nobody has truer and more devoted friends than a fair and honest physician to whom he should reciprocate in full measure. But, he should not forget that the lack of some business system and method, here, as elsewhere, has terribly handicapped many a useful career and put a host of others upon their ocean rock. I confess to you, whisperingly, if you will; boldly if I must, that I am not up as an eleemosynary institution.

No greater joy comes to a physician's lot than the relief of human suffering but how many of you entered the medical fold from such divine motives? Let us be fair with ourselves and the public and admit that we were largely influenced by the belief that we could prepare ourselves to give value received, make a decent support for ourselves and families and lick the lash of no lord or master.

If we are conscientious, our work is no bed of roses. There is not a provincial practitioner in the State, with a large clientele, who does not realize that the work is terribly trying and exhausting. The average age of less than forty among us proves this contention.

We should not be afraid to send in our bills and stand for their payment where justifiable. This should be done with tact but in a way which

lets the public know that we want what is justly ours. We should display good judgment in our charges and not expect impossibilities. There is no better field for the display of good horse sense than in the collection of medical bills.

Have the courage to refer call to others when you know you are being systematically defrauded by people who are able to pay. It is far better to sit in your office and study well the few cases you have than to be preyed upon by those who laugh at your folly. If a man is competent, energetic and reliable, he will not fold his hands, long, in idleness. Very few who are able to pay, drop away from efficiency, if made to settle their bills. There is nothing lost by the departure of those who will not.

I confess to an increasing skepticism about the deep sympathy, appreciation, constancy and thoughtfulness of charity patients as a class. They are, too often, the most uncharitable people in the world. They call you at all hours of the night, in all kinds of weather, and demand much more attention and sacrifice of time and energies than those who pay their bills. There are exceptions, but that is the rule. Be the charity pack horse of the community, if you will, but don't forget that when hoary age creeps upon you and the larder is running low, a host of your picked patients, along with a troup of your objects of charity, in your palmy days, will coldly throw the old medical Jonah overboard just the same. They soon forget past favors when the step is unsteady and hangs upon the staff of senility.

Don't be a "Cheap John." The public values a professional man in proportion to the estimate he places upon himself. Keep abreast of the times, supply yourselves with a neat office and go in good, but not grand style. Otherwise you may find yourself confined to the servants in the back yard. If you understand your business and the public believes it, you needn't worry so much about the fees your rivals are charging. There is a niche for all to fill. It is selfish for the strong man to expect the weakling to compete with him, equally in fees.

A few good patients will drop off permanently to the cheap physician but the vast majority will return in due time and stick closer than a brother. Don't ask a man for his practice as is too frequently done among us, nor pursue him if he quits you. It lowers the calling. Demand the fees due you and let him go his way in peace. This is a free country and we should not feel that we own any body.

It behooves the general practitioner to get down to business if he has not already done so. All the existing signs indicate that his future path is beset with many snags and obstacles. With specialists, sanatariums and hospitals growing more and more popular, the life blood will be drained out of us unless we look to our laurels and stand together. Unfortunately, suspicions and petty jealousies hang, like millstones around our necks. We look happy and harmonious in our conventions but in competitive rivalry the "green-eyed monster" frequently claims us as its victims. We are, with due deference to our great profession, like the handsome canine and the purring cat which lay peacefully on the rug in front of the cozy fire

of a quarrelsome old Dutch couple. "Yust look at dat gat und tog" said she, "dey never quarrels and fights like us. "Yah" said the old man, "I know dat; but yust die dem together and de debel will be to play."

Specialists and hospitals are a great blessing to the human family and nobody knows that better than the vast army of physicians who feed them. We should all patronize them and I am sure we do, without exception. But like all good things they may be, and are, abused. The surgeons in charge of every hospital will tell you that fingers are sent up for amputation by timid provincial physicians and the long list of minor and intermediate surgical cases which heretofore have been, and can now be, successfully and safely, performed at home by any average country surgeon, are practically all going away.

Nor is this all. There is now a specialist for every department of medicine, so that there is little left for the family doctor but record the pulse and administer hypodermics until they can reach the nearest hospital. Not an observant man doubts that the prestige of the whilom family physician is fast passing away. There was a time when confidence in his ability to meet all reasonable demands was supreme but he is gradually drifting into a mere hewer of wood and drawer of water, so to speak.

Ian McLaren was fortunate in the time and place when he wrote his beautiful chapter on the country doctor in "Besides the Bonnie Brier Bush." "Dr. McLure, of Dromtochy" is fast passing from the stage of action and we will only learn of him through by gone records.

I am not berating any body. I am simply stating facts and staring them straight in the face. The time is fast approaching in the war on disease, that the specialist will be in absolute control of the medical and surgical ship and all that the general practitioners can hope to do, is to scrub the deck and scour the guns. The country doctor is practically horned off every track now, except that of obstetrics and inroads are rapidly being made on this, his last remaining specialty. Whether he can make a strong stand here will depend largely upon circumstances. There is no reason why he should vacate. With the exception of celiotomy—which is a rare necessity—the average physician fairly well versed in local anatomy and obstetric surgery and with some nerve, can cope with almost any case that presents itself, provided he will supply himself with the proper armamentarium.

I close as I began with the question, "What is the remedy?" There is but one. Local sanatariums and small hospitals, manned by men ambitious to excel along different lines, must spring up in practically every county in the State. Fortunately, that is the drift, now. It must develop not only from the standpoint of prestige, but from motives of self-protection, financially and otherwise. Those who are crossing the meridian of their professional careers and soon to step over into the beginning shades of the evening, care only to point out the snags ahead that they may be at least, partially avoided by those in whose breasts the fires of ambition are raging. Nobody but a simpleton can fail to see the hand writing on the wall. The purely country doctors are fast moving into the small towns and the

ground is gradually slipping away under these. There is nothing left for them but to gird up their loins and prepare to meet the issue or drift into a mediocre lot of mechanical pill rollers.

THE EARLY DIAGNOSIS OF GALL STONE DISEASES.*

(By John Egerton Cannaday, Charleston-Kanawha, W. Va.)

It is not my purpose to speak of the classic symptoms of gall stone disease in its final, sometimes, hopeless stages, with these we are familiar. The average text book describes terminal stages and dead house findings to the serious detriment of the patient. There is relatively speaking no such thing as symptomless stone in the gall bladder. If we inquire carefully into the past history we will find the symptoms in abundance. We had as well speak of a symptomless stone in the urinary bladder as in the gall bladder. Neither gall stone colic nor jaundice are at all necessary to the diagnosis of gall stone disease. The sooner we get over this fallacy the better it will be for our patients. The very earliest symptoms are often quite trivial in character and frequently referable to the stomach. There is a feeling of fullness, weight or distention in the epigastrium. This is both persistent and annoying. It is generally relieved by belching and vomiting gives complete relief. Relief may be given by bending the body forward, by loosing the clothing or by flexing the thigh or the body. There is at times a little pain in the gall bladder region, at times a respiratory effort is cut short by a sudden stabbing pain. There may be a slight chilliness in the evening with a goose flesh feeling of the skin. These symptoms have often gone unrecognized. About every fourth woman past middle age and a few less men have gall stones.

By constant care as regards the diet, hygiene and the use of laxative mineral waters, it is often possible for these patients to keep in a condition of comparative comfort. But if we wait numerous retrograde changes may take place in the liver, gall bladder and pancreas. When the time for operative treatment becomes imperative the mortality risk is high and the technique of the work difficult. The early operation is easy, safe and prophylactic. The question of removal of the gall bladder or its drainage is largely dependent on the practice of the individual operator as to whether he is inclined to operate early or late. The man who operates early will be able to cure most of his cases by simple drainage, while the one who waits for terminal stages, will find his pathology so serious that removal rather than repair will be often an imperative indication.

*Abstract of Oration on Surgery read before the West Virginia Medical Association at Elkins, October, 1909.

CLINICAL REPORTS.

REMOVAL OF BULLET FROM BLADDER.

(By E. C. Harris, M. D., Anderson, S. C.)

I from three or four reasons bring notice to this session of this somewhat interesting case.

First it is not a common occurrence to find a bullet lodged in the bladder, so much so Dr. F. T. Miles, of Baltimore, in his annual lectures before his class referred to with much pride, that he was the first man that had removed a minieball from the bladder and placed it on exhibition in the Army and Navy Museum in Washington, D. C.

Second, the number of years the man carried the missile before it gave him much annoyance, and third the formation of a calcarious deposit around the bullet.

John Butler, colored, age 36 was shot in the coccygeal region in the year of 1895. His position at the time of the injury was in a marked stooping position, or as he expressed it he was on his allfours. Hands and feet.

The injury at the time was not considered or thought to be a fatal one but symptoms of injury to bladder and rectum were both present. The bullet was never located. Treatment was paliative and left to nature alone and in some seven or eight weeks he made a fair recovery apparently, but in 1906 he began to have bladder trouble that came on not unlike Cystitis. In April 1909 he first consulted me for what I considered a good line of symptoms for stone in the bladder. The usual examination with sound was made and with success.

All preparations were made for its removal. He was placed upon the table and by accident he made the remark that he had been shot some 15 years ago in the region of the bladder, but had not mentioned the shot before this.

The operation itself was not of unusual interest as he made a good recovery in six weeks. The lower rout or Perineal Cystotomy was chosen to my entire satisfaction in every way. The weight of the bullet and stony formation is 480 grains.

LISTER VERSUS MIDWIFE.

(By H. L. Wilson, M. D., Jordan, Clarendon County, S. C.)

This caption might be considered a misnomer. The case is reported not to exploit the skill of the attending physician but to show the match-

less reconstructive power of the greatest of all doctors, nature, who while the attendant physician may be ministering to others sick or taking much needed rest or perchance as some time happens, is recreating, stays steadily by the sufferer with gentle hands quietly and softly loosing pathological knots that may have puzzled the medical attendant.

I was called on at 8 a. m. to go five miles to remove part of a Placenta. When reaching the house, about nine, found white woman, multipara, had been delivered early the night before by midwife with placenta praevia. She stated to me that there was piece of "de atterbuth dat I cant git."

Upon examination found the entire uterus prolapsed clear out of the vagina a mass as large as my two fists around which she had tied a cord tightly, "to keep him fum gittin way." She stated that she had tried several times to pull "him out." Fortunately for the patient, she failed. The woman was suffering fearful agony. The Uterus was swollen, echymosed, until purple. Of course the first step was to cut the string and return the uterus to the pelvis which promptly relieved the pain then aseptic douches were ordered. The prognosis was rather an unfavorable one.

Now comes the result which would have made Lister green with envy. Her recovery was uneventful, in fact as good as we ever have.

I expected a septic fever or possibly a gangreen from the ligature tied tightly around the Uterus for fully twelve hours or more.

Visited the patient several times expecting at every one of the visits to find her with temperature and to be told that she had been having chills. Dismissed the case after the tenth day. Some three weeks afterward met the patient with her husband riding in a wagon just completing a thirty mile ride. This was in August and she has had no unfavorable sequelae up to this time.

SALIVARY CALCULUS.

(By H. W. Rice, M. D., Columbia, S. C.)

A negro wanm, aged 60, consulted me on account of a swelling at the side of her tongue, which had existed a number of years. It would at first swell up, remain sore for a while, then it would "run" and subside, to again make its appearance at irregular intervals.

More recently, however, it would remain swollen and "run" most of the time—a purulent, instead of a watery, discharge, as at first. Whenever the growth would swell it would pain and interfere with the movements of the tongue.

Examination showed apparently a fibro-cystic mass, freely movable to the left side of the tongue, the size of the thumb. From the anterior end exuded a thick, purulent discharge.

It was tender on pressure, but not acutely inflamed.

The woman was anesthetized, and the tumor enucleated en mass. A

rather profuse hemorrhage was controlled by pressure, made with pledgets of absorbent cotton rolled in dried sulphate of iron.

When the growth was incised, it was found to contain a stone, boat-shaped, weighing fifty grains, lying in the dilated duct of Wharton.

DEPARTMENT

OF THE SOCIETY OF MEDICAL SECRETARIES, SOUTH CAROLINA MEDICAL ASSOCIATION.

DR. ALLEN J. JERVEY, Charleston, Chairman.
DR. MARY R. BAKER, Columbia, Vice-Chairman.
DR. L. ROSA H. GANTT, Spartanburg, Sec. and Treas.

LET US THEN BE UP AND DOING.

(By L. Rosa H. Gantt, M. D., Secretary of the Society of Medical Secretaries.)

It is a question if the medical profession of South Carolina in its history has been brought so squarely face to face, with so many vital medical problems as will confront it during the ensuing year. The development of preventive medicine in the past decade has been little short of marvelous, and the fruits of past work can be seen by the record of the year just gone. During the past year there was not a single epidemic of yellow fever in the United States. Its absence is credited to the hygienic measures propagated by the medical profession.

Advanced medical thought claims to have unlocked the secret of malaria and typhoid, in the past decade. The Great White Plague is being fought with the united forces of the profession and laity upon hygienic grounds. The question of medical inspection of school children must be dealt with sooner or later. Rockefeller has given one million dollars to eliminate the hookworm from the South, and this work must be done by the Southern physician. It is due to South Carolina skill and observation that the presence of pellagra in this country is recognized and acknowledged. Up to the present time South Carolina has been the centre of knowledge and information of this disease in the United States.

With these problems facing the profession in South Carolina, can the Society of Secretaries be inactive, or in lack of material for active and

energetic work? If South Carolina is to hold its lead in pellagra investigation it must be up and doing! for interest in this disease is now universal. If we are to keep abreast of medical thought and advancement, the interest of the physicians generally must be keenly aroused.

Let the Society of Secretaries encourage and foster a movement among the profession for individual thought and investigation of the problems before us. The truth of medical theory is to be learned by observation in the actual practice of the profession. The experience of the individual physician in the treatment of disease may lead to the acceptance or rejection of medical theory. Why not then encourage a systematic report of cases and a more careful study of them.

A profound study of advanced medical thought is necessary if we keep abreast of the times. There is not a more favored spot for a study of the mosquito theory of malaria than in the southern portion of the State. The general government sent its experts to this State as the best location to study pellagra. The hookworm is to be found in the sand hills, and typhoid and tuberculosis are everywhere. With such a field of clinical material, we should have an abundance of papers and reports, not copied from text books, but from the investigation and experience of our physicians in handling disease.

An era of hygienic and preventive medicine is on us, and unless the medical professions of South Carolina prepares itself and meets the issues fairly and squarely, the laity will, for it is to be doubted if in the history of medicine there has ever before been such universal interest in medical problems and preventive medicine.

DETERIORATION OF GALENICALS.

Notwithstanding the general belief that drugs deteriorate readily it is true that the ordinary alcoholic preparations of alkaloid-containing drugs are fairly stable. Dr. A. R. L. Dohme (American Druggist and Pharmaceutical Record, July 26, 1909), has investigated the rate of deterioration for a number of galenical preparations by assays made at specified intervals. The stock was exposed to light and from it small amounts were repeatedly taken, so as to imitate the conditions prevailing in the ordinary retail drug store. Practically none of the products examined had deteriorated to any appreciable extent, while in such as had, the deterioration came well within the limit of experimental error. The exceptions to this are powdered extract of physostigma, fluidextract of cocoa, fluidextract of aconite root, and the tincture of aconite root, after a half-year's standing.

The deterioration in the case of tincture of aconite root was not great enough to affect its therapeutic value markedly. Strange to say tincture of coca was found not to deteriorate, in which respect it differed from the fluidextract. Contrary to general belief nitroglycerin tablets were found to be quite stable.

SOCIETY REPORTS.

ABBEVILLE.

(Dr. C. C. Gambrell, Secretary.)

The Abbeville County Medical Society held its regular monthly meeting in Dr. Neuffer's office Dec. 3rd. This meeting was attended by the faithful regulars and the routine work of the society was attended to. Under the head of clinical cases Dr. Simpson presented a very interesting case of periostitis of the tibia, which had been under treatment for two months.

Dr. Neuffer presented several clinical cases.

The member appointed to read the paper for this occasion being absent the time was spent in discussing heart cases and we hope to devote our entire meeting in February to this subject and have a number of heart cases present so the different valve lesions can be heard and differentiated. In January we are to have the district association meet here and of course we are anticipating a good crowd and a very interesting meeting. The following members have been elected to office for the year 1910:

President J. R. Bell, Due West, S. C.; Vice President, G. A. Neuffer, Abbeville, S. C; Secretary and Treasurer, C. C.Gambrell, Abbeville, S. C. ; Delegates, W. D. Simpson and C. C. Gambrell.

We hope to make the year 1910 the most profitable of the Abbeville County Society.

ANDERSON COUNTY.

(W. Frank Ashmore, M. D., Secretary.)

On December the sixth the Anderson County Medical Society held its regular annual meeting.

The program was omitted and several matters were attended to. A resolution was passed that in the future all ministers, and other professional men be charged regular fee for service rendered.

Officers for the ensuing year were then elected as follows:

President, Dr. J. R. Young, Vice President, Dr. R. L. Sanders; Secretary and Treasurer, Dr. W. F. Ashmore; Censor, Dr. J. O. Wilhite.

On December the twentieth the Society met with only eight members present.

Drs. J. C. Harris and C. F. Ross made a joint report on a case of Traumatic Epilepsy, upon which they had recently operated with good results.

Dr. Ross also presented, in an interesting paper, the latest surgical teaching on Traumatic Epilepsy.

The Society adopted the following tribute of respect to the late Dr. L. J. Mann, submitted by Drs. Richardson, Ashmore and Young:

"Remembering that death has again visited us and that one of our younger members, Dr. L. Junius Mann, is no more, we desire to record our feelings of sorrow and of loss.

Let a page in our minute book be ascribed to his memory, whereon the secretary may record the fact of his untimely death.

Let the family of our deceased brother be assured that for them we have the depest sympathy and with them we share a sense of keen loss.

We recognize that in him were combined in an unusual degree a love for his profession, a high sense of duty, and a real desire to serve his fellow man. In the art of inspiring his patients with hope and good cheer, he was a master. By his many acts of unselfish service, he had endeared himself to many in this community, and some of them bear us witness that his keenest delight came in ministering unto "one of these—the least of my little ones." Could more be said?

Appreciating the nobility of such a life of service, we desire to thus formally acknowledge our sense of sorrow and of loss."

The program committee, consisting of the officers, have gotten out a neat program covering the first quarter of the year. A copy of this has been sent to each doctor in the county, and we are hoping that it will serve as a reminder.

January meeting.—Two interesting meetings have been held this month. On the seventeenth, the symposium on rheumatism was the subject. Dr. J. B. Townsend read a very interesting paper on "Rheumatism and So-Called Rheumatism." His opinion was that all cases, save the acute articular variety, were so-called rheumatism.

At this meeting the president announced that a warrant had been served on Dr. B. F. Carpenter, of Belton, charging him with "Practicing Medicine Without a License." Dr. Carpenter waived a prelimniary hearing in the Magistrate's Court.

The Society adjourned to meet in February.

CLARENDON.

(Chas. B. Geiger, M. D., Secretary.)

The regular quarterly meeting of the Clarendon County Medical Association was held December 22nd, 1909, at Dr. Chas. B. Geiger's office, the President, Dr. W. M. Brockinton, presiding.

Dr. Chas. B. Geiger read a paper entitled "Self Help."

Dr. A. S. Todd stated that he had expected to present, at this meeting, a clinic of some interest, but owing to the cold weather the paient was not able to be present. He explained that the case was one of tumor of the umbilicus, in an otherwise normal, male, white child, now nearing six weeks

old, which he had been called to see after delivery by a midwife.

The tumor, he stated, was somewhat of a pear shape, about 2 1-2 by 3 1-2 inches in size, covered by a membrane, continuous with, and resembling the outer membrane of the cord. Through this membrane could be seen a body of dark-colored substance, of firm consistency, resembling liver or spleen tissue. The pedicle was about an inch in diameter, and was covered for about one inch with a trumpet like continuation of the abdominal dermal coat.

The parents had objected to an operation, and hence he did not know whether the contents of the tumor was a malplaced organ or an abnormal growth.

Upon request, Dr. Todd promised to present the case, if possible, at the next meeting of the association.

Post Graduate Work.—The Association decided to take the post graduate course of work, and will meet every Wednesday evening at 7:30 o'clock.

It was also decided to have the regular meetings monthly, instead of quarterly, as they have been heretofore. The regular monthly meetings will be held every fourth Wednesday afternoon, at 4:30.

The following officers were elected to serve the ensuing year:

President, Dr. C. E. Gamble; Vice President, Dr. A. S. Todd; Secretary and Treasurer, Dr. Chas. B. Geiger; Delegate to State Society, Dr. A. S. Todd; Alternate, Dr. H. L. Wilson; Board of Censors, Drs. O. M. Woods, Thomas W. Gunter, and W. M. Brockinton.

COLUMBIA MEDICAL SOCIETY.

(Mary R. Baker, M. D., Secretary.)

The annual meeting of the Medical Society of Columbia, S. C., was held December 13, 1909, the President, Dr. L. A. Griffith in the chair.

The following members were present: Drs. C. W. Barron, D. S. Black, A. Earle Boozer, W. A. Boyd, G. H. Bunch, F. W. P. Butler, Mary R. Baker, F. A. Coward, S. B. Fishburne, W. E. Fulmer, R. W. Gibbes, H. H. Griffin, L. A. Griffith, S. E. Harmon, C. L. Kibler, Oscar LaBorde, R. A. Lancaster, J. H. McIntosh, P. V. Mikell, R. L. Moore, C. J. Oliveros, L. B. Owens, L. K. Philpot, D. S. Pope, H. W. Rice, A. E. Shaw, J. H. Taylor, C. F. Williams, William Weston. Visitors: Dr. William Symmers of Ireland, and Dr. Wm. C. Abel.

Dr. H. W. Rice reported an interesting case of Salivary Calculus, and exhibited the stone which he had removed. In discussing the case, Dr. Gibbes said it was a rare condition; that he had been able to find very little on the subject in medical literature. Dr. Rice did not agree with him, as one man had reported over one hundred cases.

Dr. Rice also reported a case of hemorrhage of the spinal cord due

to violence. He gave a very full and interesting description of the case, including the post mortem findings.

Dr. William Symmers was requested to address the Society. He gave a most interesting account of the research work done by Dr. Loos in the Egyptian Hospital with which he was at one time connected. He said that Dr. Loos demonstrated clearly that the embryo of the Egyptian Hookworm could and did penetrate healthy unbroken skin. Dr. Symmers stated that the body was not infected primarily through the alimentary tract but were killed by the acid gastric juice.

The embryo penetrates the skin not only through the hair follicles, but even penetrates the cuticle where there are no follicles or glands. The embryo enters the lymph vessels and seems to send before it a toxin which causes a hemorrhagic condition and a round cell infiltration of the lymph glands. The glands in this condition have no power to destroy the embryo, which passes into the main lymph channels and finally into the right side of the heart. It is then deposited in the lung; it now passes through the walls of the air vesicle in to the vesicle, thence into the trachea, then into the esophagus, on into the stomach.

The embryo changes very materially in its passage through the animal body and the gastric juice now has no effect upon it.

Dr Symmers said the Egyptian Hookworm, contrary to the American varity, was very hard to expel from the intestinal tract; that after the most persistent and prolonged treatment the eggs appeared in the feces.

The thanks of the Society were extended to Dr. Symmers for his interesting and instructive talk and a recess was taken in order that the members might have the privilege of meeting him.

The following officers were unanimously elected:

President, Dr. S. E. Harmon; Vice President, Dr. R. A. Lancaster; Secretary-Treasurer, Dr. Mary R. Baker; Delegate, Dr. F. A. Coward; Censor for two years, Dr. D. S. Pope; Censor for three years, Dr. S. B. Fishburne.

The newly elected Preident, Dr. S. E. Harmon, treated the members of the Society to an oyster supper.

The Medical Society of Columbia held its regular monthly meeting January 10, 1910, with the President, Dr. S. E. Harmon, in the chair.

This meeting was devoted to a general discussion of medical ethics. Dr. Wm. C. Abel was elected a member.

The Society endorsed the work being done for the prevention of tuberculosis.

PICKENS.

(R. J. Gilliland, M. D., Secretary.)

At the December meeting of the Pickens County Medical Society, the following officers were elected:

President, Dr. W. A. Sheldon; Vice President, Dr. C. N. Wyatt; Secretary and Treasurer, Dr. R. J. Gilliland; Censor for three years, Dr. J. O. Rosemond; Committee of General Arrangements, Drs. H. E. Russel, W. M. Long, and J. L. Bolt; Delegate to State Society, Dr. W. A. Tripp.

No papers were read, the essayist, Dr. Pander, being excused.

Dr. Boxton R. Jarrott, of Central, will read a paper on pneumonia at the next meeting.

On January 5, 1910, the Pickens County Medical Society met, Dr. W. M. Sheldon, the new president, presiding.

The attendance was good, only a few absentees.

Dr. Jarrott, who was to read a paper on pneumonia and Dr. Pander were not present.

Drs. Tripp and Wyatt reported interesting cases that had occurred in their practices, which were freely discussed. Dr. L. F. Robinson read an able paper on the cause of pellagra.

Dr. W. M. Sheldon was elected a delegate to the Atlanta Hookworm conference.

At the next meeting Dr. J. O. Rose will read a paper on Venereal diseases.

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SPARTANBURG.

(L. Rosa H. Gantt, M. D., Secretary.)

The annual meeting of the Spartanburg County Medical Society was held December the 31st, 1909. The yearly report of the secretary showed that the Society added nine new members to its roll during the past year, and had lost, by death, one; by removal, one; making a total increase of membership of seven—the complete enrollment being fifty-three.

After the routine of business was finished, the election of officers was entered, and resulted as follows:

President, Dr. A. R. Fike, Spartanburg; Vice President, Dr. W. A. Smith, Glendale; Secretary, Dr. L. Rosa H. Gantt, Spartanburg; Treasurer, Dr. W. H. Chapman, Whitney; Delegates to the State Association, Drs. W. P. Coan and Geo. E. Thompson; Censor, for three years, Dr. J. L. Jefferies.

After discussing various plans to increase the attendance at meetings, during the coming year, the Society adjourned to the Spartan Inn, where an elegant banquet was enjoyed.

YORK.

(Jno. I. Barron, M. D., Secretary.)

The York County Medical Society held its regular meeting in Yorkville, January 3rd. This meeting was given up to the election of officers for the ensuing year.

Dr. W. W. Fennell, of Rock Hill, was elected President; Dr. W. A. Hood, of Hickory Grove, Vice President; Dr. Jno. I. Barron, of Yorkville, Secretary and Treasurer. Dr. W. B. Younge was elected to fill the vacancy of Censors.

Before vacating the chair, Dr. M. J. Walker, the retiring President, made a short talk, thanking the members for their kindnesses during his term of office. Dr. J. H. Saye, of Sharon, answered on behalf of the members.

The doctors then repaired to the Shandon Hotel where an elaborate banquet was served by our hospitable proprietor, J. Ed. Sadler. Those present were Drs. W. W. Fennell, I. A. Bigger and W. B. Younge, Rock Hill, B. N. Miller, Smyrna; W. A. Hood, Hickory Grove; J. H. Saye, Sharon; E. W. Pressley and J. W. Campbell, Clover; R. A. Bratton, J. D. McDowell, M. J. Walker and Jno. I. Barron, Yorkville and invited guests of the doctors: Dr. Wilson McConnell, of Davidson, N. C.; Rev. J. H. Thacker, of the M. E. Church; Rev. J. L. Oates of the A. R. P. Church, and our fellow co-workers, Drs. A. M. Barnett of the York Drug Store, and D. L. Sheider of the Star Drug Store.

After partaking of a sumptuous banquet, Toastmaster W. W. Fennell called on Dr. E. W. Pressley, Mr. Thacker, Mr. Oates, Dr. Walker, Dr. Saye and Dr. Wilson McConnell for toasts after which the meeting adjourned.

Our Society is in a flourishing condition and we think that we have one of the best in the State.

THIRD DISTRICT CONVENTION.

On November 17th, 1909, at noon, in Greenwood, S. C., the meeting of the Third Councilor District was called to order, in the Council Rooms, by Dr. R. B. Epting. A full attendance was present.

Dr. Mason moved that an Association of the Third District be organized. This motion was seconded and carried.

Dr. Bailey wished to know of what counties the Third Councilor was composed.

Dr. Mayer named the counties over, viz: Greenwood, Abbeville, Saluda, Newberry and Laurens.

Dr. Frontis, in speaking of the organizing of this Convention, addressed himself to young men; saying, as an old man, he regretted that he

did not have the opportunities that the young men have today. Not until this movement got afoot, in our State, he said, under the organization of the American Medical Association, had this opportunity been afforded him, and that he had profited very much by it. This, said the speaker, is an opportunity that ought to be seized. With only one meeting of the State Association a year, it is hard for the doctors to attend, at least some of them have to miss it, but with these district and county associations the members can attend very frequently.

Dr. Frontis said he believed in these district and county meetings.

Dr. Bailey proposed carrying the motion by vote, as there were a sufficient number from each county to do so.

Dr. Neal said that he was a believer in this organization.

Dr. Epting expressed himself as being very much in favor of it, and said he was going to vote for it.

Dr. Jones thought it of vital importance, and said he was willing and anxious to do all that was for the best of those concerned.

All of the doctors present, who expressed themselves, spoke in favor of organizing the District Convention, and each thought it a good opportunity to avail themselves of.

Dr. Neal brought out the thought that such a meeting as this District Convention would enable the doctors in the district to know each other. "I think we ought to organize, and organize at once, then if it dies, let it die," he said.

Dr. Mason, "I think that every man present will reap a greater benefit than if he belonged to a State Society. For one reason, because it is a great deal more convenient for the doctors to attend this society than the State Association, and as the State Association has lived as long as it has, we have every reason to believe that the District Association will live just as long. I think that we can come out and have papers that are just as good as they are today, and we can make it so valuable that every man must come out. It will pay each one of them."

The motion for the organization of the District Convention was unanimously adopted.

Dr. Neuffer then made a motion to elect Dr. Mayer president, but Dr. Mayer, on account of a burden of other offices, declined the nomination. Dr. Neuffer was then nominated for president, and was unanimously elected president.

Then followed, in like manner, the election of Drs. R. E. Hughes, of Laurens, Vice President; G. P. Neal, of Greenwood, Secretary.

Dr. G. A. Neuffer, of Abbeville, then extended an invitation to the organization to meet in Abbeville, in January, 1910, whch invitation was accepted by a rising vote. The subject for discussion, and the exact time of meeting, was left to be arranged by the officers of the organization later on.

Dr. Epting moved to leave all detail work for the organization and

time and subjects to the president and vice president. Motion carried.

The meeting then adjourned to accept Dr. Epting's invitation to dinner at the Oregon Hotel.

REFORM OF MIDWIFERY.

Dr. von Haberter, who was appointed a short time ago to the post of chief inspector of health, is directing his main efforts toward a reform of the midwifery act now in force. The most important of the features of a bill prepared by his advice is the lengthening of the curriculum of the midwives from six months to two years. Of these twenty-four months, six are to be devoted to preliminary and theoretical, eighteen to practical instruction. The present regulations in many places permit any woman to call herself a midwife without having obtained any proper teaching at all. The want of midwives, especially in the poorer mountainous districts, is very keen; especially as medical help in such places is still less available, and therefore, the authorities have not been very strict. But now it is intended to put into each village inhabited by at least 200 families a midwife with full qualifications, unless there is a doctor in the place. The study of midwifery must be conducted in one of the special midwifery clinics (five proposed, of which three are already present). An examination must be passed, which will entitle the woman who has reached the required number of marks to a diploma in midwifery. Frequent surprise visits by the district officers of health are also planned, in order to see that all sanitary regulations are followed out by the midwives. Puerperal fever among the cases in the charge of one woman is to incapacitate her for a period of eight days after her last visit there, and special stress is laid on the necessity of the quarantine in the instruction given to them. Every year at least one "midwives' day" or local congress will be held by the chief officer of health of the district, to inform them of any important facts dealing with midwifery. Meanwhile the necessity of instructing the present working midwives in modern asepsis and antisepsis, the nursing of infants, the value of breast-feeding, and the routine use of Crede's instillations of silver nitrate or another silver preparation into the eyes of the new-born is urgent, and instructors are few. The women without diplomas are, therefore, offered an opportunity to obtain at least the fundamental principles of this work through so-called Wander-lehrer (migrating teachers) sent out to the smaller places. After a certain time (two years are considered too short) only qualified matrons will be allowed to take up this kind of work. It is estimated that, while the costs of these reforms will not amount to more than $150,000 a year, the saving to the public will be more than treble this figure.—Vienna Correspondent in J. M. A.

LEFT-HANDEDNESS IN THE GERMAIN ARMY.

A short time ago a military surgeon presented to the army medical society the results of his studies on the occurrence of left-handedness in the army. He examined 300 left-handed soldiers. At least half of these came from families in which this peculiarity also occurred in other members; it appears to be twice as frequent among males as among females. Enuresis, feeble-mindedness, stuttering and other disturbances of speech occur much more frequently among left-handed than among right-handed people. The frequency of left-handedness is greatest among the recruits and diminishes with the length of service. The speaker reaches the conclusion that the left-handed are both physically and mentally less suited to military service than the right-handed.—J. M. A.

ILLEGAL PRACTISE OF PHARMACY.

Not all pharmacists practise their profession personally. There are, in fact, large pharmacies whose proprietors employ a great number of non-pharmacist clerks, who are engaged in the preparation of medicines. This being the case, the Paris medical society (Syndicat Medical de Paris) has just passed a resolution that the inspectors should exact that in conformity to the law, the preparation of medicines be carried out exclusively by graduate pharmacists in all the laboratories and manufactories of pharmaceutical products, and that all infractions of the law be severely repressed.

THE PULSE IN APPENDICITIS.

The pulse rate is a very important guide in determining the necessity for operation in acute appendicitis; but sometimes it should be altogether disregarded. If distinct pain and tenderness have not abated after twenty-four to thirty hours (especially if vomiting and more or less rectus rigidity coexist, but even without these) it is proper to operate without waiting further, no matter what the temperature and pulse rate; a gangrenous appendix may be found in a patient whose pulse is 70 and temperature 100 degrees!—American Journal of Surgery.

ALCOHOLIC DELIRIUM.

In persons suffering from alcoholic delirium, never fail to determine whether there is any retention of urine, as a distended bladder, through reflex irritation, may increase restlessness and prevent sleep.—International Journal of Surgery.

The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, FLORENCE, S. C.

Entered as second-class matter June 2, 1909, at the Postoffice at Florence, S. C., under the Act of Congress of March 5, 1879.

ANNUAL SUBSCRIPTION, $2.00.

VOL. VI. FEBRUARY, 1910. No. 2

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

Business communications relating to subscriptions and advertising should be addressed to

JOURNAL S. C., MED. ASS'N., FLORENCE, S. C.

ORIGINAL ARTICLES.

PNEUMONIA.*

O. B. Mayer, M. D., Newberry, S. C.

To prevent any confusion in regard to this disease, I will only refer in this paper to acute Lobar Pneumonia, and it will be my purpose to so arrange what I have collected for your consideration, that it wlil not only invite but provoke discussion; for I believe that most of the benefit that comes from these meetings is due to the interchange of ideas, resulting from our discussions.

I think it very opportune to take up the consideration of Pneumonia now, for we are approaching that season of the year when it is most prevalent in this section of our country; and in addition to this Pneumonia is one of the most universal diseases found everywhere, and most important of all, it is next to Tuberculosis, the one from which most deaths result.

*Read at the Third District Medical Society meeting at Abbeville, S. C., Jan., 1910.

It has now been demonstrated that Pneumonia is a germ disease, produced by the Micrococcus Lanceolatus. It is presumed that this germ gains admission to the cellular tissue between the air vesicles through the mucous membrane lining the bronchial tubes, after it has been inhaled into the lungs. The inflammation of this cellular tissue, which occurs after the germ has reached it, and which is the Pneumonitis, is an effort of our vis medicatrix naturae to prevent the entrance of these germs into the general circulation. How much success follows this efffort, is shown in the severity of the Pneumonia.

The local inflammation of the lungs varies in extent from an insignificant portion in one lung to the involvement of much of both lungs.

The absorption of the toxins produced by this germ produces the rise of temperature, and rapid pulse rate, just as toxins do in typhoid fever, diphtheria, and other toxic diseases. It is now generally believed that other germs besides the germ of Pneumonia sometimes gain admission into the inflamed lung tissue, and also into the general circulation, and the toxins peculiar to these germs are added to those of the Pneumococcus.

With this general description of the cause of Pneumonia, let us consider some of the symptoms. The symptoms that are usually expected and looked for, are pain, of a stabbing character, in the side, increased by inspiration, fever, usually preceded by more or less of a chill, and cough. These three are usually sufficient to make a diagnosis, and it is natural to expect them, but they do not always present themselves, and the absence of them does not prove that the disease does not exist.

In elderly persons, pneumonia may exist with no cough and little or no pain, and only a slight rise in temperature, and in children the pain is frequently referred to the abdominal region. The flush of the cheek on the affected side, a significant symptom when it does exist, is sometimes absent. I have referred to these to show that in the earlier stage of this disease it is sometimes difficult to make a diagnosis. I believe pneumonia is the most frequently overlooked of all diseases.

When the consolidation occurs or the crepitant rales appear anyone who is a careful examiner can make a positive diagnosis. I have left a

I believe pneumonia is the most frequently obstructed of all diseases. significant symptom to the last so as to emphasize its importance. It is the abnormal ratio between the pulse and respiration. The normal ratio is 1-4, but in this disease it is from 1 beat of pulse to 2 respirations—or every 1 to 1 1-2. Forthergil in his most remarkable book on the Physiological factor in diagnosis, emphasizes the importance of this fact in the diagnosis of this disease.

Excluding complications, the causes of death in Pneumonia are from the heart, suffocation from lack of O., toxaemia by the Pneumotoxins and thrombosis in the large vessels communicating between the lungs and heart.

There is much to discuss about the pulse in this disease and the propriety of blood letting. When in double Pneumonia, where the blood is dammed up by the consolidation of the lungs, and also the important fact that the pulse may be without any evidence of danger, and yet the right

side of the heart be so weakened by overwork that death is imminent, I think the examination by stethoscope of the right side of the heart, as often as the radial pulse is examined, is a duty we always owe our patient.

Suffocation from lack of O. rarely or never occurs in single Pneumonia, and is a factor in the production of death only in dobule Pneumonia, but this fact should not deter us from providing a sufficient amount of fresh air from the outside of the house, free from those contaminations that are so constant in the air inside the room, and which, no doubt, does assist in the production of death.

That the fever and rapid pulse rate are due to the toxaemia produced by the Pneumococcus germ and called Pneumotoxin is now conceded. It is also conceded that the crisis, which is such a remarkable condition, is brought about by the development in our bodies of a substance called Anti-pneumotoxin, and the difference in the time of the crisis is due to delay caused by various conditions of our system in the production of this curative agent.

The similarity between the condition of the patient in the crisis of Pneumonia and that in the Diphtheritic patient who is under the influence of Diphtheritic antitoxin is striking. The slowness of the pulse, the cool skin, the perspiration and slow respiration are identical, and are convincing evidences of the similarity of the cause in each.

It is interesting to consider some of the most valuable experiments that have ever been made in this disease in the lower animals by the use of Antipneumotoxin in the prevention and cure of Pneumonia in the rabbit.

I quote the following from Anders Practice: "The Klempera Brothers found that the rabbit could be rendered immune by injections of large quantities of the fluid, or glycerine extracts. From 10. to 20. C. C. of serum taken from a mon-receptive animal (one that was immune), and injected into the veins of one suffering from Pneumonia the symptoms subsided rapidly, and the animal entered upon a rapid recovery. The same serum used in a similar manner upon healthy animals rendered them non-receptive." The important truth that the serum of persons during the convalescence from Pneumonia contains an antitoxin, which, when injected into animals suffering from Pneumonia, would cut short the disease has also been demonstrated by these observers. If the recovery from Pneumonia in human beings is due to the antitoxin produced in the body of the patient by the vis medicatrix nature, the uselessness of some of the medicines that have been advocated and used in the treatment of this disease is quite obvious. I must not be misunderstood as meaning no medicines are useful in the treatment of this disease; for I think there are a number of conditions that can be overcome, which will in may cases mean the recovery of the patient.

Poor ventilation is a very frequent condition that lessens the chances of recovery. I do not believe the production of anti-pneumotoxin can be as quickly or as abundatly accomplished in a patient who does not receive a sufficient quantity of pure O. as in one who does. I do not believe anti-pneumotoxin can be produced in poorly nourished patients as easily as it

can be in those who are sufficiently nourished, nor do I believe the patient who is enduring the agonizing pain that some do in this disease will produce anti-pneumotoxin as quickly as those who are properly relieved.

The blister that was once so much relied upon in this disease has been practically abandoned. There is some question in my mind about the value of the blister. Does the absorption of the blister serum have a curative power in itself, or does it supply a substance that can be turned into Anti-pneumotoxin?

The blood letting that was once so frequently used has also until quite recently been laid aside, whether wisely or not is a subject I hope to hear discussed. I would not leave Pneumonia just here and be true to the facts in the case without calling your attention to the recovery of many cases of Pneumonia not by a crisis but by a lysis. The reason for this difference in the mode of recovery from this disease is worthy of consideration.

As has already been stated, it is very important in the treatment of this disease that the condition of the heart be carefully watched, especially the sounds produced in the right side, as these sounds are the best guide to the condition of the heart. Here is a very important point in the discussion of the treatment of Pneumonia; viz., what is the best means of strengthening the heart.

Since the sputum in this disease contains large quantities of the germs of Pneumonia, all of the sputum should be carefully and properly destroyed, and as the patients swallow much of the sputum, the feces should be as carefully disposed of.

The splendid results following the use of serum in the lower animals has led to its use in man, and there is now on the barket a Pneumolitic serum which may lead the way to more successful treatment of this now so fatal disease.

THE TREATMENT OF PNEUMONIA.*

Dr. S. L. Swygert, Greenwood, S. C.

In the treatment of Pneumonia I beg to differ with the present authorities of the later day text books.

Dr. Osler, says Pneumonia is an infectious and self limited disease, which can neither be aborted nor cut short by any known means at our command. While I am sorry there is no specific treatment, I do know that it is not a wholly infectious self-limited disease and can be aborted, cut short and cured, by the intelligent administration of the properly selected drugs to suit symptoms of the three stages of Pneumonia. The chances

*Read at the Third District Medical Society meeting at Abbeville, S. C., Jan., 1910.

are best to abort or cure and quick results follow; if seen in the first twenty-four hours of the attack. Now we expect to treat the *patient* with Pneumonia and not Pneumonia per se.

Now as to management. The temperature of the sick room should be between 65 and 70 degrees F., wth plenty of fresh air, but no draft on patient and no great change of clothing.

In the absence of any indication for special local treatment the chest may be enveloped in a cotton-wool jacket laced in front with string. Patient is not allowed to leave his bed until one week after crisis. Water is allowed, especially when tongue is dry and patient thirsty. The diet should be liquid, not too free at the beginning, when we are using the cleaning out remedies. The diet should be fluid or semi-fluid; milk, chicken soup, meat juice, egg white, buttermilk etc., every three hours.

Now in order to make myself plain I will divide Pneumonia into three stages and treat each stage separately. The first, Congestion, 2nd Red Hepatization, 3rd Gray Hepatization. In the first stage of Congestion I always have a great hope of aborting Pneumonia any give large doses and push them to get the physiological action of the drugs while patient is robust and strong when I have all to gain and nothing to lose. So I give him Calomel, grs. 5 to grs. 10 Pulv Rhei gr. 3 to 4 with a little soda in capsule or on tongue. Why I give this there is more or less Toxenia in all diseases caused by faulty Metabolism and especially so in this disease, therefore, I clean out and keep clean.

If very painful and restless give the usual hypodermic of morphine and atropine to keep the patient quiet until I can get my fly blister to draw. Oftentimes when I have a bad case and can map out the outlines of the congested area and have the pain at that point, I put my fly blister on in this stage, which will relieve restlessness and nervousness and pain and wont need the hypodermic repeated. Now here in this stage if I don't apply the fly blister use Cownteiritants, Turpentine, Mustard or Antiphiogistine. I have often seen very happy results after the fly blister has drawn well and been dressed with oil, temperature drop and patient resting nicely. In this 1st Congestion stage, when temperature is 105° F, pulse strong and bounding—beating 130 to the minute, when lungs are already engorged with too much blood no drug is better indicated than Varatrum Viride, Dr. Norwood. Give five drops of Dr. Norwood's Verat Viride every three hours until you get the physiological effect by reducing the rate of pulse to 70 to 80 to the minute and you will have the pulse soft and slow and skin moist. Increase the dose until you get this effect.

Why do you give Varatrum? Since it is a heart and arterial sedative. it produces a good effect upon the inflamed condition of the lungs, causes the arterial walls to relax and thus bleeds the patient into his own vessels, thoroughly relieving the engorgment of the lungs and also throwing off the Toxines through the different organs of the body. I will admit in over doses this is one of the most powerful drugs we have; is one of the least dangerous; since it almost invariably causes vomiting before enough of the drug is absorbed to produce serious consequences. Oftentimes when

the above treatment does not reduce temperature quick enough give Phenacetine gr. 5 with comp. Dovers Powd and repeat every three or four hours.

This brings the treatment to the second stage, Red Hepatization. This is very much like the later part of first; still controlling the pulse and temperature with Varatrum and Phenacetine and give a mixture like this:

Spts. Ether Nithros 4dr.;
Syr. Scillae 4 dr.;
Liq. Pot Citratis 1 1-2 oz.;
Liq. Ammon Acetat 1 1-2 oz.;
M. Sig. Take two teaspoonful every three hours in water.

In this stage the lung is consolidated in parts affected and if you have not blistered over such parts put on fly blister. If you have a red or brown dry tongue give Turpentine or Cresote.

Now for the third and last stage, Gray Hepatization. The red color gives place to a mottled gray and the solidified area begins to soften and in this stage is where the crisis takes place; if it was not aborted in the first stage; so I give a stimulative treatment. Alcohol, Strychnine, Sulphate Spartine, Ammonia Salts, to sustain the heart and liquify the exudation. For the still increasing toxemia give Carbonate Creosote or Acetozone.

In following this line of treatment for the last twenty-five years I have met with the best of success and always look forward for recovery in Pneumonia. So you see from this feeble testimny, such as it is, is all in the support of the contention that something can be done in the way of aborting and curing Pneumonia. There may be a fallacy underlying all these claims, but it behooves those who would dispute them to discover the fallacy and disprove the claim before giving utterance to contra statements regarding unyielding of Pneumonia to therapeutic endeavor. It is possible that all these presumably competent observers are wrong and that they have happened upon a series of favorable cases in which the result would have been equally favorable if they had followed a purely expectant treatment, but it is not probable. We believe that there is at least some ground to hope that those are right who contend that Pneumonia is something amenable to treatment, and in this hopeless do-nothing treatment can but result in a deplorable sacrifice of human life.

INFLAMED JOINTS.

Patients afflicted by swollen, painful joints often insist upon local application. Whether the arthritis be traumatic or rheumatic, this combination will give satisfaction: Acidi Salicylici dr. iii, Tinct Opii dr. iss, Ol. Ext. Belladonnae grn. x. Aq. Cinnamomi iv. M. Sig.: A teaspoonful Terebinthnae oz. i, Ol. Caryophylli oz iii, Alcoholis oz. xii. Rub on the affected parts every two or three hours. Chloroform may be substituted for the oil of cloves if desired.—American Journal Clin. Medicine.

CONGENITAL HIP DISLOCATION.*

A. Robert Taft, M. D., Charleston, S. C.

Prof. Materia Medica and Therapeutics Medical College of the State of South Carolina, Lecturer Pediatrics Roper Hospital Polyclinic School.

The history of the treatment of congenital dislocation of the hip as given by Davis in The Journal of Medical Science for January 09 is rather an interesting one. It began in 1826, says Dr. Davis when Dupuytran brought forward his pelvic band. Corsets, jackets and braces followed. In 1847 Herbert and Pravaz advocated traction and pushing the head over into place. While this was being followed and extended by Bradford Mikulicz, Schede and others, Guerin, the first to cut the muscles subcutaneously, and followers of his, were, at the same time developing the cutting operation. Poggi of Bologna in 1888 replaced the head in a new acetabulum scooped out of the head of the Ilium. Hoffa and Lorenz each modified and perfected cutting operations, and in 1894 attended the International Congress at Rome prepared to fight for their respective operations. Here Paci of Pisa by his brilliant summary of results and demsonstrations completely routed them. He gave his results in twenty-three congenital cases, besides five of pathologic and old traumatic ones. Also those of one other surgeon who had used his method. He submitted a specimen showing a perfect antemortem reposition and finished by performing his bloodless operation on a patient before the assembled surgeons. As the author says, the effect was ludicrous. No more was heard of cutting operations. Lorenze, in the following year, modified Paci's procedure and travelled far and wide exploiting it.

Congenital dislocation of the hip is the commonest congenital dislocation we have. It is six times as frequent in girls as in boys.

Whitman and Taylor state that this deformity in the majority of very young cases is usually upward or anterior; but as the greater number of cases seen later are posterior, it is probable that one form is frequently changed into another.

The Pathology of these has only been understood of recent years, the first open operation having only been done a few decades back. In the majority of young cases, according to Sherman, the California surgeon, who is such a strong advocate of the open operation, we have an approximately normal Acetabulum with an enlarged and flattened head lying near it. Of course the Acetabulum is often rudimentary and some times triangular, shallow or voal.

A shallow secondary acetabulum, formed in part by pressure of the head is found on Ilium, but it often is not of sufficient depth to assure an

*Read before Medical Society of South Carolina, October 15, 1909.

efficient support for the head and so, as upper margin gradually recedes, another may be found above.

The upper end of the femur is usually atrophied, the neck shorter, and the angle lessened. There are also secondary changes in the bones of pelvis. The long muscles of the thigh are atrophied and gluteal group flattened.

As a rule dislocation of hip is not accompained by defective development or deformities elsewhere, altho cases in which general laxity of ligaments is present, or a series of malformations are not so very uncommon.

The first symptom is a painless limp when child begins to walk, usually at about 18 months; but the mother may have noticed a lump on the buttock or snapping in this position before.

The limb becomes shorter when the weight is thrown on it, therefore there is a lunge toward the affected side. This shortening gradually increases until it may be two inches or more in time.

The trochanter is unduly prominent and may be plainly palpated, and the buttock is flattened. A sliding up and down of the head of the femur on the ilium may be felt. This is called pumping.

Abduction is limited. We also have some tilting of the pelvis, and very likely, some lordosis or scoliosis, but no spasm.

In translation from a piece recently published by Redard and Badin in the French Hospital Gazette we find the following concerning the operation: "It is by no means a simple procedure. Considerable difficulty is offered by the shallowness of the socket and deformities of head and neck of fermur, reaction and capsulation of capsular ligament."

The muscles that most oppose are the adductors.

The authors give the operative technique in six stages, giving the anaesthetic, fixation of pelvis by manual force, mobilization and downward traction of femur, stretching of muscles, reduction by flexing, leg to right angles, forcing head into socket, mobilization in abduction and flexion of 90 degrees.

Prognosis: The Lorenz operation is not free of danger. In 450 operations quoted by Lorenz the following accidents occurred:

Fracture of neck of fermur in. . . . . 11 cases.
Fracture of the pelvis in. . . . . 3 cases.
Peroneal Crural and Sciatic Paralyses in . . . . . 11 cases.

In some cases the paralysis persisted, in some recovery took place. In one case the Femoral artery was ruptured, the patient recovering with no ill effect. In another gangerene of the extremity necessitated amputation at the hip joint.

In cases treated under six years 50% in unilateral and 25% in-bilateral, are entirely cured. Nearly all are so much improved that the posterior displacement is made into an anterior, and the functional result is fairly good.

Report of Case.

Dr. Taft then presented the following case: White male child at five

years in which reduction was made with difficulty; at the same time an equino-varus was operated on.

The child is now in the second position and the foot elevated by a cork sole to prevent recurrence of foot difficulty.

(Two X ray photographs were sent showing hip before and after treatment, but were not plain enough for the making of cuts. Ed.)

SOME FACTORS WHICH GOVERN DRUG ACTION.*

Geo. E. Thompson, M. D., Easley, S. C.

Various classifications are made of drugs according to their action. But that a drug ofttimes produces an effect not in accord with its classification, or even no effect whatever, is beyond question. The reasons why this variance of action is possible would seem to merit some discussion.

Not infrequently we find a condition in which the total therapeutic effect of a chosen remedy is not desired, since the majority of active agents possess the power to do ill somewhat in proportion to their activity.

This untoward action of a drug occurs as the result of a physiological law that one function of the body is stimulated only at the expense of another function.

In order to understand many of the influences which determine the action of a drug some insight into its manner of action is necessary.

Drugs act mechanically, chemically, and through the medium of the nervous system.

The actual procedure whereby one drug stimulates the flow of urine, another relieves pain, or still another spends its energy in the cardiac ganglia, is difficult of explanation. We say that a toxic dose of morphine paralizes the respiratory centre or apomorphine acts on the vomiting centre, but the exact why and how of this selection is as mysterious as the problem of life itself.

As practically all the great drugs owe most of their action to the influence of the nervous system, the factor of greatest importance in the action of medicines is one of the greatest complexity.

In order to produce a constitutional effect in the organism one or more of the active constitutents of a drug must be assimilated. A possible host of influences may prevent assimilation, thereby presenting one of the chief obstacles to therapeutic action. On the other hand a drug is sometimes retained in the system for an indefinite period until some subsequent influence precipitates its effect. Therein lies the explanation of a cumulative action. Rapidity and means of drug elimination also have much to do with results produced. Even the pain relieving power of a hypodermic of morphine may be minimized by the occurrence of repeated vomiting during its excretion of the stomach.

*Read before the District Medical Society meeting at Easley, S. C., Nov. 1909.

A clean alimentary canal favors therapeutic effect. By beginning the treatment of some disorders by purgation, not only is the benefit of elimination secured, but the patient is in this manner prepared for subsequent medication.

Drugs acting on the vaso-motor system must necessarily influence the heart action, as the force of the cardiac impulse is the chief factor in the causation of arterial pressure. Since some remedies act by their own elimination we must conclude that the promptness and effectiveness of their action depend much upon the rapidity and thoroughness of their excretion.

One of the difficulties encountered in the intelligent treatment of disease is the differentiation of disease from drug symptoms, the action of drugs presenting many parallels to the manner of disease.

The human body at times possesses an immunity either individual or acquired toward certain diseases, and the same may be said with reference to the action of certain drugs. Predisposition to disease finds an analogy in idiosyncrasy.

Aside from theinfluences of age, habits, and previous history, psychical impressions have something to do with the action of drugs.

Suggestion as an aid to medicine was employed even in the days of Hyppocrates, who reminded his students that one needs possess "natural talent" to practice medicine with the greatest success.

Perhaps the most effective suggestion is that which is practiced unconsciously, but whether unconsciously or otherwise employed, it occasionally helps to tide the patient into convalescence.

DYSMENORRHEA.*

Jessie H. Teague, M. D., Laurens, S. C.

I fully appreciate the honor, and it is an honor, that your former president conferred upon me by making a special request for a paper from me on this subject, and I further appreciate the difficulty which attends a satisfactory discussion of it.

I feel that I must begin with a wholesale indictment and charge each one with an inexcusable derelection to duty; first as to our woeful lack of interest in the subject per se, and secondly as to an unwarranted carelessness concerning the general welfare of the patient, frequently giving them an unceremonious dismissal as soon as the pain is relieved and that accomplished, too otfen, I fear, with the administration of an opiate.

While it is a condition which very rarely if ever, seriously menaces a woman's life, yet it makes her very uncomfortable and at times miserable for a period of about one week in every four. It is a condition characterized by pain, and pain is the one symptom, above all others, by which a patient will measure the seriousness of a malady, at the same time pain

*Read before Jan., 1910 meeting of Laurens County Medical Society.

should appeal heroically to a doctor's sympathy for suffering humanity.

Furthermore, one is very apt to measure a doctor's professional skill by his ability or inability to offer relief. Now I submit for these reasons it behooves us to make a more thorough and conscientious study of this condition, as we meet with it in our daily work and exercise greater and better efforts for its relief.

Definition. Dysmenorrhea is not a definite disease, but a symptom. According to some writers the term should not apply to cover all the painful or other disagreeable sensations accompanying the menstrual period. The headaches, pains in the joints and muscles, backaches and nausea and vomiting so frequently associated with the menstrual epoch do not constitute Dysmenorrhea, though doubtless, they are due to or influenced by the same cause which produces the Dysmenorrhea. Others, notably Dr. Kelly, hold that all unpleasant and abnormal sensations incident to this period, grouped, are the symptoms complex constituting Dysmenorrhea. This seems to be a distinction without a difference. It matters little to us, however, as practical medical men how much or how little the technical name should cover if the cause be the same.

The one pre-eminent symptom is pain; the intensity, duration and location and time of occurrence of which vary. It may be nothing more than an unpleasant feeling of fullness in the pelvis and it may be so severe, so agonizing, so unbearable that a woman may be driven to self-destruction so frightful and pitiable is her condition, while others will take the numerous intervening grades.

The height of the pain may immediately precede, accompany or follow the flow, with frequency in the order named. It may last one or more days, sometime through the entire period and may be confined to the uterus, to one or both ovaries or diffused generally throughout the pelvis.

It may be classified in the following four varieties:

Congestive. The simplest of all as congestion is always and necessarily a feature of the menstrual function and when the degree of this congestion is greater than can readily be tolerated, pain is the result. Of course tolerance of this condition differs in women of different temperaments and there is an acquired or rather acquiescent submission to the inevitable in not a few cases.

Obstructive. There has been a great deal of discussion, pro and con of this form, many claiming there is never sufficient obstruction to the flow to cause pain except, of course, in cases of gross mal-development. Others equally eminent and I believe correctly, holding the converse to be true. Example, malpositions, cervical stenosis; contraction from scar tissue has been over emphasized in former years.

Neurotic. The main point in this is to decide whether the pain is primary and stands in the relation of a cause of the neurasthenia or hysteria, or if the converse is not true, the general nerve conditions giving rise to the imaginary pain.

Membranous. This is a very rare form and may be dismissed with a very few words as it will concern us only as a curiosity.

Etiology and Pathology. No definite cause can possibly be assigned to cover dysmenorrhea, as it is not a definite disease. A review of the literature of this subject will invariably lead you to one decision, viz., that the cause and pathology of the malady is the cause and pathology of the disease underlying the condition, but I feel it incumbent upon me to depart radically from this view. In discussing the etiology I think it highly proper to call attention to the unmistakably frightful increase of this trouble, coincident with the advance of civilization. It is one dark blot upon the otherwise radiantly immaculate unfolding scroll of gynecologic progress and advancement. The primal cause of this increase is to be traced to the mode of life and manner of dress, the strenuous life and the strenuous dress. It is truly alarming to note to what extent the younger generation of females will thoughtlessly and unwarrantably hurl themselves upon the sacrificial altar of style and ambition. We may term it "feminine extremes or female dissipation." On the one hand is the lady of wealth and leisure, the society woman, with her late hours and late mornings as well as nights, her midnight suppers and her midday breakfasts, her irregular habits generally, but more especially as to defecation and exercise, in fact often a total lack of proper physical exercise, with her high heel shoes and her straight front, pelvis-binding corsets. She worships mammon and reaps her just reward; among other things, dysmenorrhea.

On the other extreme is the overly ambitious female, who keeps her entire nervous system constantly "on edge" in her effort to excel in the commoner pursuits of life. The strenuous life, in another form, leading to the same result. She must appear well, she must dress in style, she must be popular to make a favorable impression, and verily she has her reward: among other things dysmenorrhea.

Another class, otherwise intelligent, veritably wear themselves to a "frazzle" in a vain effort to strictly and scientificially observe all the health rules ever printed and then some. She idealizes health, feminine health and gives her life-work over to "staying well." And she has her reward: among other things dysmenorrhea in an asylum for the nervous insane.

But I thank God we still have some good women who don't go crazy over health, who don't care for the trivialties and frivolities of life; but who are fairly well contented to be a housewife and man's help-mate and enjoy this life and are happy with the rearing of their children, the true mother, and she can never have her full reward this side of the heavenly shores. Thev too, however, may be enlightened on the pernicious evils of the high heel shoes and certain forms of corsets, more especially the low, stiff, straight-front. There is a scientific reason why these things should produce these results.

In the first place the high heel elevates the rear of the foot 2 1-2 to 4 inches, which disturbs the vertical upright equilibrium of the body. To overcome this, head, shoulders and chest must be carried backward, the lumbar curvature of the spine is exaggerated, in consequence of which the

belly protrudes abnormally and the uterus is pushed unnaturally forward. The relative position of pelvic organs, with their nerves and blood vessels may be altered in more ways than we know. To overcome this abdominal prominence the straight-front corset was introduced with its train of evils. By its downward, backward pressure, the pelvic organs are crowded lower into the pelvis, increasing its already disturbed correlation of parts and producing a constant and chronic congestion which is barely short of pain, ing volcano erupts.

This enforced change of form may go on until an unnatural shape is permanently acquired and why cannot this abnormal form be transmitted to the suffering victim's offspring so that the babes may come into the world with an embryonic dysmenorrhea that will just as surely develop and become active as the child develops into womanhood and the functions peculiar to her sex become active.

If God Almighty had intended that woman wear pot legs on her heels I verily believe Mother Eve would have been supplied and if Nature had meant that woman wear an armor plate front, she is too lavish to have denied the necessity.

What is the remedy? I say back to nature and back to God. Lower the heels, discard the armor plate, early to bed and early to rise, eat three square meals a day and eat them at meal-time, leaving off the trimmings and the frills, take plenty of outdoor exercise just short of actual fatigue and get actively in line with the great optimistic "Don't Worry" Club of America. That is the prevntive remedy.

Treatment of the Developed Cases.

Don't give opiates for the pain except as a very last resort, then in the smallest efficacious dose and without the patient's knowledge. The reason for the precaution is obvious, and the same applies to alcoholics.

As to a vaginal of bimanual examination, it is unpleasant for both the patient and physician and general add medicinal measures should be exhausted. These failing to give relief, we have no other course to pursue than to insist on a thorough examination, preferably under anesthetic, the latter being a necessity in the young unmarried woman.

General Measures. Patient needs an abundance of nutritious food and it is sometimes necessary to feed between regular meals. She needs more sleep than on who is well and should be encouraged to accustom herself to two or three hours daytime sleep. Avoid late hours, and all cares and excitement and frequently she should give up school duties for a period. Insist on fresh air and outdoor exercise, between, and absolute rest in bed during the menstrual period. The bowels practically always need attention and not a few cases will disappear when the long standing obstinate constipation is relieved. It is not sufficient to inquire if the bowels are regular, for I had a patient once assured me the bowels were regular and upon further inquiry learned they were regular twice a week, Mondays and Fridays. The more efficient of the drugs for relief of menstrual pain are the coal tar derivatives, acetanilid, phenacetine, etc., fortified with some heart stimulant as some of the ammonium compounds, aromatic

spirits, etc., hydrastis canadensis and viburnum prunifolium equal parts of the tinctures in g. s. doses will act nicely. At time apiol in 4 gr. doses, night and morning for two or three days preceding the period will sometimes abort the attack.

Bromides in 15 gr. doses every 3 to 4 hrs. will occasionally give you a happy result. When there is nausea, bromide xl grs. or antipyrine xv grs. in hot saline solution 1-2 to 1 pt. may be exhibited per rectum and retained.

Local applications of heat, to abdomen, back and hot foot bath, with or without and addition of mustard, mustard plasters to spine, have all given good results. Electricity in various forms of currents and variously applied has many good features, but is not used nearly so much now as formerly.

Returning now to the examination: I want to reiterate the importance of this. In more than 50 per cent. of all cases, some definite disease will be found as the cause, and you will find this only at the examination, when you will be able to advise intelligently what course to pursue or if she must seek a specialist.

I want now to speak of one operation that any of us can do and should do before advising that she seek further gynecologic talent. This applies to those cases that have no discoverable disease of the pelvic organs and that is dilatation of the cervix with curettage of the uterus. The operation is not founded on a scientific basis, but it gives results and results are what we want. No less an authority than Kelly advocates this and states that about one third of the cases will be relieved and with one operation and about as many more with one or more repetitions. Rapid dilatation is the operation of choice, as it can be done at one sitting; therefore is more convenient and less dangerous when done properly. When an anesthetic is used for the examination, this operation can and should be done at the same time, if the case is suitable.

The same strict aseptic precautions should be used for this as for any major surgical procedure, and any other surgical means does not properly come within the scope of this paper.

UNCINARIASIS.*

Oscar W. Nettles, M. D., Spartanburg, S. C.

Uncinariasis is one of the most formidable and prevalent diseases now confronting the Southern physician. It also is one of the few diseases that the general practitioner attaches to but small importance. This, no doubt, can be attributed to two reasons; first, the difference of the degree

*Read before Spartanburg County Medical Society, September, 1909.

of infection in different localities, and second, the small number of physicians who resort to the microscope to make a clear diagnosis.

In a paper such as this, which must necessarily be brief, only the salient points can be discussed.

There are two distinct varieties of the hookworm; the uncinaria duodenalis, or the old world hookworm, and the uncinaria Americana, or the new world hookworm. The latter of these, which was brought to the attention of the medical profession by Dr. Stiles in 1902, is the variety that we have to deal with, and, most especially, the country practitioner.

The habitat of this parasite is in the small intestines, especially the jejunum and ileum, but all parts of the alimentary tract may contain them.

The sources of infection are in localities usually where the sanitary conditions have been neglected, and the excreta from the infected patients are promiscuously dropped around. As soon as a person is infected, that person becomes a focus of infection, distributing the eggs of the parasite with every evacuation of the bowels.

The eggs, after being deposited with the feces, are, during the first 24 hours, changed to an embryo. This embryo, after shedding its skin, is converted into a body known as the "encysted larvae." No further development takes place until the larvae reaches the intestines.

The recognized avenue of infection, as demonstrated by Looss, is that larvae pass through the skin into the lymph and blood channels, where they are carried into the lungs, and are there liberated into the air passages. They then pass upward through the trachae to the larynx, down the oesophagus to the stomach, and into the small intestines.

Admitting the above theory as correct, it seems strange and incredible that this circuitous route would be chosen by the larvae when such a direct and convenient avenue as the mouth exists. To me, it seems that the hookworm larvae can contaminate drinking water and food stuffs, especially such vegetables as we eat raw, as easily as the typhoid bacillus. While Looss' theory is the accepted one, I am inclined to think that further investigation will prove the mouth an important factor as an avenue of infection.

The symptoms of uncinariasis vary according to the degree of infection, in some instances only the finding of the eggs in the feces upon microscopical examination will prove the existence of the hookworm, as no other symptoms manifest themselves.

A typical case will usually give a history—upon close questioning—of having had ground itch several months previous—this, of course, being caused by the entrance of the larvae into the skin. The patient complains of headache and dizziness, especially on arising quickly; following this the skin becomes pale, and the child will tire on slightest exertion. The appetite undergoes radical changes—at first there may be a temporary loss followed by a ravenous, and, in some cases, a much perverted appetite. Nausea and vomiting, with pain in the epigastric region are sometimes marked. Constipation is usually the rule, but a diarrhoea may prevail. There is marked emaciation, with the development of a prominent abdo-

men. There is a lack of function on the part of the cutaneous glands, resulting in the skin becoming dry and hard. The degree of anemia is not constant, the skin varying in color from a slight paling to a dirty greenish appearance in very marked cases. The visible mucous membranes being of a chalky white color.

The circulatory system furnishes some very important symptoms. In long standing cases the force of the heart beat is diminished and palpitation is fairly constant. Haemic murmurs can nearly always be demonstrated and visible pulsations of the veins of the neck are present. Quite a number of patients present such typical clinical pictures that the diagnosis is easy. The only positive method of diagnosis is by the use of microscope.

In the treatment of uncinariasis I consider the prophylaxis as much, if not more, important than the medication. As the active agents causing the disease are contained in the feces, the most important propylactic measure is the proper disposal of the egg laden excreta. This can be most easily accomplished by the use of disinfectants. The same precautions should be observed in handling the stools as is in other infectious conditions. A solution of chloride of lime, or one of carblic acid 1-10, should be used, being sure the disinfecting solution is well mixed with the feces, and allowed to stand for three hours before being emptied.

Of the many drugs recommended for the removal of the worms, thymol is the most efficient, given in doses ranging from ten to thirty grains, according to the age and condition of the patient. The dose should be evenly divided and the halves given two hours apart. About one hour before the first dose, one oz. of Mag. Sulp. should be given. This drug should be repeated about three hours after the last dose of thymol. No solvent of thymol should be given on the day of treatment.

The feces should be examined a couple of days after the above treatment, and if eggs are still found the same treatment should be given, repeating every ten days until eggs fail to appear. Some preparation of iron, or iron in combination with quinine and arsenous ac. helps the patient during convalescence.

THE FAMILY PHYSICIAN.*

Samuel G. Dixon, M. D., L. L. D., Commissioner of Health of Pennsylvania.

In the literature of a century ago three figures stood out prominently from the general background in all efforts to depict American life. While this was especially true of the smaller towns and country villages, yet it also held good for the cities in a modified degree.

*An address delivered at the opening of the Second Annual Conference of County Medical Inspectors and Physicians in charge of the State of Pennsylvania's Tuberculosis Dispensaries, held in Philadelphia, October 4 and 5, 1909.

These figures were the minister, the judge and the doctor. They were the types in the minds of the people of all that was respectable, cultured, refined and worthy of honor. By education and by professional attainment and association they belonged to a class by themselves, so distinct indeed that in New England the great medical humorist, Oliver Wendell Holmes, designated it the Brahmin Caste. Of these three worthies the minister commanded, to the highest degree probably, the reverential respect of the community; the judge was held in the greatest awe and his opinion was more constantly sought in political and civic matters; but the physician held the affections of the people and on the whole was probably more of a controlling factor in shaping public opinion and in the dissemination of knowledge on familiar subjects than either of the others.

Speaking as one having authority on medical matters, it is easy to understand how he became an authority on all subjects of a scientific nature and so was looked upon as a sort of walking encyclopaedia, to be trusted as the ultimate reference on all subjects save those of religion and the law, which had their own special exponents. The intimate friend and confidant of his patients, he became familiar with family histories and troubles and was constantly appealed to for advice in the solution of domestic difficulties. His presence during circumstances of stress, anxiety and affliction brought him very near to their hearts so that even the minister was scarcely bound to them by closer ties. Under his watchful supervision families grew up, came to maturity and in their turn established families of their own, so that he became a traditional element in the family life to share in every rejoicing and to be appealed to in every emergency, medical or otherwise. The power for good which he thus wielded in his neighborhood cannot be overestimated, and the use which he made of it, as a general rule, contributed largely to making his profession honored and respected.

Two of these figures still occupy to a good degree the niches to which former generations assigned them. The clerical and the judicial representatives are yet looked up to for instruction and guidance and continue to be leaders of the people. But can we with clear conscience make the same claim for our own profession? Has not the physician measurably stepped down from his pedestal and ceased to be the controlling factor in the affairs of the community as well as in its domestic life that he once was? And has he not, to a considerable extent, himself to thank for this change in the attitude of the public? Instead of making the esteem, affection and confidence of his families and the community his chief goal, has not his thoroughly laudable ambition to build up a reputation for a high degree of technical knowledge led him to neglect the psychological treatment so essential in the practice of medicine even in this day when medicine is almost entitled to be called an exact science? And incidentally is not this neglect opening the door for laymen to step in and usurp his prerogatives? Has it not led him to slight the opportunities which constantly present themselves of sharing with patients the training of their children so that they may become more perfect types of humanity?

Moreover it will not do to disregard the suggestions of the medical instinct. We must take into account the *feeling of the picture* presented by our patient. We may assert with mathematical accuracy that the patient presents a heart murmur of a certain definite character or that the excretions contain specific bodies which we recognize as pathological or that there are typical rales in the lungs, but all these do not enable us to arrive at an accurate prognosis unless we accustom ourselves to recognize all the conditions taken collectively which form to the experienced bed-side practitioner the *feeling* of the case. The artist will tell you that a picture at which you are gazing is a failure, that it cannot possibly live before the criticism of the world. He may admit that it is well drawn, that the perspective is correct, and the grouping good, that it has color and atmosphere but after all it lacks the true feeling which the public demands to satisfy its sense of the beautiful. The physical and mental conditions of your patient combine to produce this intangible feeling of the case, and in order to be able to recognize this, the most skillful practioner must be willing to spend his time with his patient and consider his history and antecedents and carefully study his environment.

I fear, fellow students, that we are narrowing down too much to abstract technicalities, that, for example, we are losing sight of the fact that digestion in the test tube is not performed under the modifying and stimulating influence of life which is as yet an unknown quantity. I once traveled to the State of Georgia simply to witness a most vigorous azalea growing out of a formation of pure silicate. Science cannot explain the life power that enabled that plant to draw abundant nourishment from silica, the atmosphere and sunshine. Neither can the physiologist explain just how man at times will develop and be supported on beechnuts and water. And, in regard to treating your tuberculosis patients, let me suggest just in this connection, that you must note the idiosyncracies of your individual cases and remember that yet unknown power of the digestive function under the influence of life. Study each case separately, meet its individuality and do not rest satisfied until you see evidencs that you are nourishing it. If one class of food fails try another. The medical man who declares that if milk and eggs fail to build up a tuberculosis patient, no other food will, is not to be trusted with the care of those suffering from that malady.

That you may appreciate how strong my faith is in the value of nitrogenous food stuffs in combating this disease I take the liberty of referring you to my communication to The Academy of Natural Sciences, of Philadelphia, on the "Possible Relationship betweeen the Tubercular Diathesis and Nitrogenous Metabolism," copies of which I have caused to be distributed, a statement let me say, which, although uttered fifteen years ago, I see no reason to alter.

Just before I jumped the track of my theme I believe I suggested that we are "narrowing down" too much. Enlarging upon this thought I will venture to sketch, possibly a little extremely, the daily life of a most modern and truly great medical man in one of our large cities.

His early office hours over, interrupted as they have been by telephone calls, questions from several assistants, and side door momentary consultations, he rushes to his automobile, and is whirled at top speed to the house of one of his wealthy clients, summoned, we will say, on account of the acute illness of the mother of the family. He hastens up stairs to the bedside of the sufferer. His experienced eye and touch at once furnish him the facts on which to base a diagnosis with dispatch and accuracy. He leaves a prescription suited with almost mathematical accuracy to the needs of the case (he sees a score of such in the course of a morning) promises to call tomorrow, flies down stairs and out at the front door, quite ignoring other members of the family, putting on his hat as he descends the door steps, having spent three minutes and thirty seconds on the call, jumps into his panting auto' and dashes off to the next case and so on through the entire day's work. In the course of it he attends two or three consultations, gives his opinion with clearness, sagacity and conciseness and is off again. Incidentally he stops at the medical college of which he is a bright and shining light and delivers a brilliant lecture on "The Etiquette of the Sick Room." At the close of the day he hands over his crowded visiting list to his clerk and feels well satisfied with his day's work. And well he may! As a diagnostician and prescriber, pure and simple, he has done his duty faithfully. He has prescribed judiciously and as the event will probably prove with excellent results, he has done nothing to mar his bright prospects and has maintained his standing as a profound thinker and brilliant practitioner among his fellows. After dinner, if he has time for it, he is off again to his medical society where he reads a paper on "The Medical Worthies of the Last Century," which is received with applause, and then finishes his day by joining his family in their box at the opera, in the hope of resting his weary brain.

But what has he accomplished toward establishing kindly relations with the father and children of his families and becoming an integral part of the family life. Has he not been little more than a diagnosticating and prescribing machine doing his work with mechanical precision, but leaving no more trace of his personality than would a perfect piece of mechanism?

In order that the physician may wield the influence that he did of old and regain his place of authority in the community I would suggest in contrast to the last picture the possible day's work of one who might be a happy medium between the worthy of the by-gone centuries whom our friend so delightfully recalled in his lecture, who practiced the *art* of medicine, and the modern man who practices the *science* as well as the art. During his office hours he would give each patient his sole and individual attention. Of course he would have lost no time in answering the call to the sick mother. Knowing the father intimately he would have had a friendly word with him, a promise to see him again and let him know the character of his wife's indisposition. He would make a mental note of the condition of the children as he passed them with a friendly smile. He would have taken his seat quietly by the patient's bedside and would have studied her case in a comprehensive way, allowing her to tell her story and so getting

side lights on possible complications of which the present attack was but a manifestation. His prescription for the immediate illness would be accompanied by advice calculated to prevent a recurrence of the attack and the visit would have left a snse of confidence and repose in the mind of the sufferer such as a whirlwind entrance and exit would never give.

Leaving the sick room he would voluntarily seek the head of the house, would have relieved his anxiety as to his wife's illness and given him such hints as occurred to him as to his own conduct in the care of her health He would inquire with regard to the health and constitutions of the children and, if there were indications of lack of vigor or faulty development in any one of them, he would cause such child to be brought to him and subject it to a careful examination. As a result of this precaution a commencing curvature of the spine may have been detected, or a malformation of the chest, which, neglected, would furnish conditions to invite tuberculosis. At the next house the sanitary conditions in and about the home would come in for an inspection, and some covert source of disease, such as a neglected or a hidden drain, might be discovered, which would throw light on many inexplicable illnesses in the house.

Of course all these subjects would not be discussed at one visit, but it would be the habit of mind of the physician to be on the alert for the discovery of any conditions that might influence the health of the inmates unfavorably. In other words he would not consider that his responsibility ended in prescribing a pill or a potion in an individual case of sickness but would constitute himself the jealous guardian of the health of the entire family.

As opportunity offered he would enlighten the older members of the family as to questions of personal hygiene and even call their attention to the requirements of public hygiene. He would insist on the vaccination of every child born into the family and make the parents appreciate the importance of this measure both as a protection to its own life and as a duty owed to the community.

Parents who had the advantage of such instruction would be extremely cautious about allowing their children to be exposed to those suffering from measles, whooping cough or other so-called children's diseases, knowing what terrible sequelae may result even from cases which in themselves appear trifling, and they would be as careful not to permit their own children to convey these diseases to others, as to protect them from infection. The diet of the children of such families would be plain, substantial and nourishing, fitted to lay a foundation of vigorous health which would render them immune to the germs of tuberculosis to which they must at some time be exposed, and if any child exhibited any of the well known indications of a strumous tendency, especial attention would be given to the diet of such child.

He would take an interest in the education of the children of his families. If any of them showed special morbid tendencies he would give such advice as would result in overcoming these. Children with narrow chests or tendency to spinal curvatures would be put in the way of taking appro-

priate exercise and encouraged to spend much time in the open air. Those who showed a predisposition to pulmonary affections would be placed at school in locations affording the best climatic conditions. Those evincing cardiac weakness would be guarded against excessive exercise, and the exaggerated athletics of the day. Those who showed unusual mental precocity combined with nervous excitability and defective musclar development would be warned against undue mental strain and their parents would be led to appreciate the advantages to be derived from interrupting their schooling and allowing them to lead an unrestrained outdoor life for a time.

The confidence placed in him as a doctor in physical disorders could easily be brought to bear also on moral conditions, especially in the training of the boys of the family. Growing youth who will resent the preachments of a clergyman will gladly listen to advice from a physician whom they have grown up to respect and trust. In these ways and many others which have occurred to you, such a physician would do more than any other individual in the community toward establishing a noble American type of humanity.

The pedestal is still there, but too often it stands empty and abandoned. Why should not we, any one of us, in our respective communities, essay to fill it?

The continued advance of our beloved State in the sciences, the fine arts and the mechanic arts must depend to an immense extent on the cultivation of preventive and corrective medicine. When we fully realize the fact that upon us depends the perfection of our people, we shall rise to the full measure of our responsibilities, not resting until we have seen to it that the children of our families are placed in a proper environment to permit and encourage the development of a grand race of men and women. And when the parents realize that we are taking a deep and real interest in maintaining the health of those so dear to them and instructing them how to avoid disease by all the methods that science can suggest, then the medical man will command the respect of the community to so high a degree that he will again wield the influence in our great commonwealth that his high profession entitles him to.

At present the people do not come into sufficiently intimate relation with him to understand the human side of his character and to realize the sacrifices which he is daily making for their good. The association is too mechanical so to speak. The physician and patient seem to me to have been drifting farther and farther apart. To this we must attribute the fact that he no longer possesses the influence in governmental affairs that he once did and properly should. To recover this it is essential that we should awaken to the great strides which preventive medicine has been making and cause our knowledge of this branch of medical science to be felt in each household we enter and each community in which we live.

Another thought. We, as a rule, probably do not sufficiently realize the fact that, in accepting a diploma from a chartered medical college and certain exclusive prerogatives conferred upon us, which are variously de-

scribed in the language of the diploma as rights, honors and privileges, we are incurring equivalent obligations. The transaction is not all one-sided. We owe something to the government in return.

To a certain extent we become state officials. The practice of our profession puts us in almost exclusive possession of knowledge of the most important kind, knowledge essential to the transactions of the affairs of the state and intimately associated with the maintenance of the public health. It is due to the state and the public that we should furnish this knowledge gratuitiously at such times and in such ways as the state deems necessary.

We are in possession of knowledge as to the causation of disease as well as its treatment, and it is our duty in our intercourse with our patients not only to treat individual cases of disease but to take the occasion thus offered as an opportunity for giving instruction such as will tend to prevent the recurrence or spread of this and similar diseases.

Especially in our own state has the government put our profession under unusual obligations by the generous manner in which it has provided its instructions of medical learning with opportunities for clinical instruction, by responding to our representations in the establishment of a department of health with plenary powers, under medical supervision, and by providing that department with funds to carry on its great work to an extent unexampled in the history of states.

In your official capacity, gentlemen, in connection with the Commonwealth's department of health you are the guardians of the health of the people of your respective counties. It is your business and privilege to keep a constant eye to the conditions which may contribute either to improve or to undermine their health. In order to accomplish this it is your duty to acquaint yourselves with the general state of health of your communities and especially with that of the portion still in the comparatively helpless condition of childhood.

You should make yourselves familiar with their habitations and modes of life, the ventilation of their bed rooms, the drainage of their houses and grounds, the water they drink, the food they eat and the clothing they wear. In order to be able to do this easily and without undue wear and tear, you should already have accustomed yourselves to it in your daily life as family physicians, which most of you fortunately are. And just in proportion as you have schooled yourselves to attain to the high ideal of the old time family doctor, as the guardians of the health of your families, father, mother and children, the friend and counsellor of the heads, the beloved adviser of the younger members of the household, will you be able to successfully fill your places as the protector of the health of your several counties.

You should study the vital statistics of the different sections of your county, especially as found in the annual reports of the department, and thus discover where local sources of disease are lurking. As you traverse your territory in your daily practice as well as in making your occasional inspections, traveling over the roads at all seasons and all hours, you will

have opportunities of observing dangerous grades, unsafe bridges, defective drainage, faulty railroad crossings and other dangers to life and limb, and you will call attention of supervisors or other proper authorities to such conditions and urge their improvement. Obstructions to water sources, old abandoned canals, neglected mill dams and other collections of stagnant water, as well as wet and marshy lands, will claim your especial attention.

A medical officer of health in Ohio in a recent paper pertinently calls attention to the fact that the condition of country districts is rapidly approaching that of villages and the suburbs of cities. It is not an uncommon sight to see farm residences with their barns and outbuildings occupying the space along country roads almost as closely as village or even city streets, and, though there may be broad acres behind them, the danger of water pollution and the chances of communication of diseases in other ways are equally great as in more crowded centres of population. In some ways, as he well says, the dangers are even greater in the country, as, for instance, in the breeding of flies from manure heaps, and mosquitoes from stagnant pools, rain barrels, obstructed ditches and the like. The experience of England in the banishment of malaria and kindred disease by the drainage of swamps and fens has been repeated in Ohio as well as in our state. "Up in our county," he says, "a generation ago the land was wet and swampy, with poor crops on sour land, to say nothing of the discomfort of mosquitoes and other insects and every form of disease that infects swampy districts." Sanitary cranks at last appeared who proposed to cut great ditches miles long to drain the marshy lands. The labor was great and the expense was great and the wails and protests of the taxpayers that went up were even greater. But the ditches were dug notwithstanding and th land began to yield. Want was succeeded by plenty, and malarial and kindred diseases became things of the past. Just such opportunities are awaiting each of you to become the pioneers in some great work of public sanitation.

The condition of the schools should demand your attention. As you will see by the reports of our health officers on this subject they are by no means up to the standard of modern sanitary science and the requirements of our legislators. What can be expected from a school where the closets are of the old unsanitary type, nothing more than open privies, with all their attendant stenches, open to both sexes alike, and kept in a condition of disgusting filth, or where the source of light subjects the pupil's eyes to a constant glare.

The medical supervision of schools is a subject which merits your ence, contagious and infectious diseases would often be nipped in the bud, before oppotrunity was given for their spread through the community.

The dangers of the common drinking cup and the promiscuous towel and of the lack of personal cleanliness generally need only to be faithfully impressed by the school physician and the school nurse to have them become things of the past.

Quite apart from your general responsibilities however as guardian

of the health of the people is the special responsibility which has been devolved upon you by the state in your appointment as physicians in charge of the tuberculosis dispensaries.

I need not urge upon you the importance which must daily impress itself upon you of making yourselves as proficient as possible in the diagnosis of this disease in its earliest stage. The sanatoria and infirmaries whch the state has established and s establsihing for the cure of pulmonary consumption depend entirely upon you for sifting out the applicants so that the greatest good may be accomplished by the restoration of incipient cases to health and usefulness, and by the segregate care of those in the later stages for whom only alleviation is possible. The clinics which have been arranged for this occasion will greatly assist you in this important study and I am assured that you will avail yourselves of the opportunity to the fullest extent.

To meet you thus personally is to me a matter of very great pleasure and I feel that you must share with me the pride which I cannot conceal in being intimately associated with so representative a body of professional men, filled with the enthusiasm of humanity and burning with an earnest desire to do the best that in them lies for the welfare of their fellowmen.

CLINICAL REPORTS.

A CASE OF SEPTIC ENDO-CARDITIS IN CHILD.*

J. J. Watson, M. D., Columbia, S. C.

This disease is of such infrequent occurrence in children, only about twenty-five cases having been reported, and the majority of them being over ten years old, (Diseases of Infancy and Childhood—Holt, Second Edition), and this case presenting such unusual symptoms, I deem it worth while to direct your attention to it. Some of the prominent features of the disease are absent, notably the embolic processes. Speaking of this malady Osler observes, "Embolic features are not so common, but there may be the same difficulty in determining whether the heart is really involved or not."

I regret that I am unable to give a result of blood culture, but owing to the excitement of the patient incident to securing blood, the procedure was abandoned. Post mortem was not held as patient recovered; therefore, I am well aware that the diagnosis will be questioned.

The case occurred in the practice of Dr. C. F. Williams, Columbia, S. C., and I am indebted to him for having been able to follow the case and report it.

*Read at the meeting of the South Carolina Medical Association held at Summerville, S. C., April, 1909.

Case. James S. ———, age six years, mother died of eclampsia following his delivery, family history otherwise negative.

Well nourished, strong, healthy child up to present time. No illness except measles, chicken pox, and whooping cough, the latter eighteen (18) months ago.

Present illness commenced Nov. 2nd, 1908. From then until 11th, slightly indisposed, listless and appetite poor; on 11th small papule was complained of on extensor surface of right arm, just above wrist. On the 12th, much larger and then was considered a boil, as the boy did not complain of anything except itching and burning at sight of papule. On 13th, papule much larger and considerably inflamed, only discomfort complained of was itching and burning.

On 14th, 9 a. m. fever was detected. The papule was then much larger and purplish, and marked lymphaginitis extending up the arm; the epitrochler gland was markedly enlarged and very painful to pressure. The axiliary glands not so much enlarged and not so tender. There was also noticed several red spots the size of a dime on chest, arm and two on face; temperature 102 1-2, pulse 114.

The mass was freely incessed and immediately the tissues retracted and presented a scirrous appearance, and there exuded therefrom a serous fluid. Hot bichloride compresses were applied and changed every two hours.

Six hours later temperature 100, pulse 108, the lymphaginitis was disappearing and the red spots could not be detected.

Nov. 15th, temperature 98 1-2, pulse 80. All signs of lymphaginitis had disappeared, epitrochlear gland not tender but enlarged.

Nov. 16th, boy apparently well.

Nov. 17th, at 9 a. m. similar attack as on 13th, differing only in intensity. During this attack temperature reached 103, pulse 140. The original seat of infection became much inflamed accompanied with a more marked lymphaginitis and enlargement and tenderness of epitrochlear gland. The spots on body and face re-appeared, were much larger and redder. New spots made their appearance on various portions of the body, but were not as deep red as the old ones. Temperature remained elevated for twenty-seven hours and as the temperature receded all other symptoms abated; when the temperature reached normal the boy was apparently well and remained so until Nov. 21st; on that day another paroxysm like the previous one except more severe and patient presented toxic symptoms. Temperature reached 104 1-2, pulse 160. Temperature remained elevated for thirty-six (36) hours. During this paroxysm the erythema-amination was negative, except a slight peculiarity of pulse wave. No pains complained of by patient at any time. On Nov. 23rd, systolic murmur was detected at base of heart, over aortic area.

Nov. 24th, another paroxysm. Boy intensely toxic, temperature 104 1-2, pulse 160. Sordes on teeth. Tongue dry. There was on his body patches of a scarletinal erytherma varying in size from that of a silver dollar to that of a dollar bill, and each of these patches were elevat-

ed above the normal skin, presenting a striking appearance, the face being especially red and swollen except around the mouth, and this locality was white. This paroxysm lasted forty-four (44) hours and ended like the previous one, except there was rather free sweating.

Nov. 29th, another paroxysm, toxic symptoms more severe than during previous paroxysm. Temperature 105, pulse 180. Erytherma nearly universal. Total lecocytes 25,000. Polymorpho nuclear 89 per cent. No plasmoda. This paroxysm lasted forty-eight hours. There were other paroxysms Dec. 4th, 10th, 24th and 30th. None, however, as severe as the one on Nov. 29th, but were rather becoming milder. In January they gradually decreased in severity and increased in interval. The last attack occurred Feb. 5th, temperature reaching only to 100 degrees.

Patient was kept in bed until Feb. 25th.

The treatment consisted of rest in bed, feeding to extent of appetite during apyrexial periods, for a few days sodium salicylate was given, no good resulting, was discontinued.

Twenty c. c. Poly valent antistrepticocic serum was injected on Dec. 5th, 6th, 8th, and 10th. On the 10th, there was a rather severe paroxysm, showing that the serum had not been potent, this together with the fact that the patient resisted the injections vigorously (we believing that absolute quiet was imperative) determined us in not using the serum further.

The next paroxysm was postponed for 14 days and was not as severe. The next days, etc. The patient today has a slight cardiac hypertrophy but no murmur in last three weeks. If this was not a case of Septic Endo Carditis, what was it?

TWO CASES OF HEMATEMESIS OCCURRING IN INFANTS OF SAME FAMILY.

The vomiting of blood is quite an alarming symptom but especially is this so when it occurs in an infant. Some of the causes that operate in the production of this symptom in adults do not obtain in infant life; e. g., cirrhosis of liver, gastric cancer and acute pancreatitis.

Hematemesis in infants is rarely seen, Holt having seen only three fatal cases, the eldest being 15 months old.

It would be very interesting to know the causative factor in these cases, but as an autopsy was not permitted in one, and the other recovered, a tentative diagnosis is only possible.

Case 1. William M., age 11 months, three brothers and two sisters living, none dead. Mother and father both living. Father in good health, but family history is tubercular. In April, 1908, mother complained of slight pain in chest, lassitude weakness, and slight cough. Apex of right lung showed prolonged expiratory murmur, fine rales on deep inspiration, T. B. found in sputem May 10th. Weaning child was insisted on. This, however, was not done. Mother in August had gained 10 pounds and had not shown temperature since July 1st. Nov. 1st, mother had slight pulmonary hemorrhage, child was then weaned. The infant was well nourished, walked at 10 months; had six teeth, and had never been sick. Nov. 11th, had slight diarrhoea; on 12th looked as well as usual; no diarrhoea;

slept well night of 12th. Nov. 13th, 9 a. m. I was summoned. Found child very depressed, white and cold. Temperature (rectal) 95, respirations 40, very restless. A very careful examination and questioning as to the possibility of poisoning did not throw any light upon the condition, and not until 5 p. m., when suddenly about a pint of chocolate-colored fluid was expelled from stomach. Could the evidences of internal hemorrhages be explained. This was followed six hours later by a large tarry stool.

The character of vomit and stool continued until 6 a. m. Nov. 15th, when death closed the scene.

Case 2. Mary M., sister of Wm. M. age 3 years and 9 months, a very robust healthy child; no previous illness.

Jan. 12, 1909, complained of pain in epigastric region, vometed four times during day, bowels normal; kept in bed on 12th; allowed to get up on 13th, as she seemed well. Slept well night of the 13th. Jan. 14th, 8 a. m. vomited about 12 ozs. of some chocolate or coffee ground colored material as brother had done, complained constantly of pain in epigastrium and was tender to pressure in that locality; temperature was 96, depression not marked. At 8:30 a. m. vomited about 1 oz. of same material and again at 3 p. m. about 4 ozs. Until the morning of the 15th, she vomited this black material nine times; five were very small amounts, and four rather copious. There were four tarry stools.

Vomited at 6 a. m. Jan. 18th, but nothing to suggest hemorrhage was detected. Kept in bed one month and is now strong and well. Microscopic examination of blood vomited was negative. The treatment consisted of rest in bed, no food or fluid by mouth until 24 hours after last bloody vomit. Then 1-2 oz. chicken broth every 15 minutes, gradually increased. High Cal. Chloride enemas, 6 ozs. every four hours. This was kept up for six days until enough fluid was taken by mouth, rectum never became irritable. Hypod. of Morph. Suph. 1-60 grs. every four hours for three days. After stomach was proven to be tolerant, 20 gains of Bismuth S. N. was given every four hours for one month.

What are the causes of hematemesis in infants? Ulcer of stomach, scurvey, perpura hemorrhagic, infectious diseases, scarlet fever, measles, diphtheria, malaria, venus stasis from dilated heart, or mechanical obstruction in liver or spleen. Hemophillia, swallowing of blood, toxic gastritis.

Which of these conditions would be most likely present in these cases? From the physical condition and the diet, scurvey was excluded. Perpura hemorrhagica cannot be excluded, yet it does not seem possible that you would have hemorhhages from the stomach, with no ecchimotic spots on the skin or mucus membranes. Quite frequently the disease develops abruptly, without any assignable cause in children previously healthy."—Holt.

The children had not had any of the infectious diseases or malaria.

There were no evidences of heart, liver, or splenic disease, blood showed only signs of secondary anemia. Hemophillia is excluded by fam-

ily history, no member of either mother's or father's family for generations back were bleeders. The swallowing of blood cannot be considered in these cases, as the nose and pharynx were carefully examined and no bleeding could be seen. Neither child was nursing at breast so swallowing blood from cracked nipple was impossible. No history could be gotten of children eating matches, or taking any drugs by accident or otherwise, therefore, toxic gastritis can be excluded.

Ulcer of Stomach. It is unusual not to have a history of indigestion with vomiting in ulcer of stomach. In these cases there were no such histories.

The second child complained of pain and tenderness over the stomach. The first was too young to complain.

So by exclusion we arrive at the possibility of the causative factor being either ulcer of the stomach or primary perpura hemorrhagica, with evidence in favor of the former.

Did the Phthisical history of the mother have any influence on causing ulcer?

June 8-09. Mary M. vomited the same chocolate-colored fluid—six times in two days—June 8th and 9th, and had four tarry stools. Was kept in bed one month. Today, Sept. 4th, 1909, she is in apparent perfect health.

DISCUSSION.

Dr. Wilson: I would like to ask Dr. Watson if he can give us the condition of the heart and the pulse, during the intervals of these attacks?

Dr. Watson: The heart action absolutely normal; the pulse about 80, and the child, to all intents and purposes, looked well. No dilation of the heart.

Dr. Wilson: Did the murmur persist during the intervals?

Dr. Watson: Oh yes, up to a week ago. There is a hypertrophy there now.

Dr. C. F. Williams, of Columbia: One point in connection with the treatment of this case, I wish to call to the attention of the Society. Dr. Watson omitted, unintentionally I am sure, a part of the treatment, which at that time we thought exerted a beneficial influence.

After the severe attack spoken of on Nov. 29th, we abandoned the anti-streptococic serum and commenced daily inunctions of 1-2 drachm Credes ointment. The subsequent attacks were less severe, but whether due to the ointment or not, I cannot say.

One thing I would like to have an explanation of: If this was a septic endo-carditis—and of that there is no doubt in my mind—what organism was present, and what systemic condition or combination of conditions prevailed to render such a striking picture as Dr. Watson has just outlined, which was an accurate presentation of the case?

Dr. F. A. Coward, of Columbia: I am very much afraid, Mr. President, that we missed a big opportunity, in this case, for taking advantage and working out a very novel and puzzling case. It is always the old story, "hind sight is better than foresight," and under the circumstances I don't

see where there could be any criticism. Yet we must regret that the case could not be worked out more thoroughly.

There was no trained nurse in attendance, and while Dr. Watson feels that he knows the conditions of that patient every hour during his apparently normal intervals, I am not satisfied that we have those periods exactly right. But, at any rate, we have some infection of some organism with which we are not familiar. Certainly the absence of pus would apparently rule out an infection of the ordinary pus organisms, and also rule out the more familiar infections, even with no malaria, possibly; but, at any rate, even the relapsing fever, or some other more familiar and well understood organism.

Dr. Watson closes: I would like to say to Dr. Coward, concerning the temperature, that the child's aunt is a highly intelligent woman. She nursed him and took his temperature, and at the slightest variation in temperature she either notified me, or Dr. Williams. An accurate temperature was kept, and we had all the advantages of a trained nurse, without the disadvantages of one.

A CASE OF COMBINED INTRA AND EXTRA-UTERINE PREGNANCY.

Leland B. Salters, M. D., Bennettsville, S. C.

The case first came under my notice, Saturday, the 8th of February, 1908. The reason assigned for calling in medical aid was that the midwife feared the patient had "caught cold in the womb."

The patient was a negress, 21 years old, of medium height and build. She was remarkably healthy during childhood, scarcely remembering mild cases of perhaps measles and chicken pox. Menstruation began about her 14th year, and continued uninterruptedly until her present pregnancy. She denied ever having been the subject of venereal disease or syphilis. Close questioning elicited no evidence of previous uterine, tubal or ovarian disease. Malaria had attacked her several times, but she had never been afflicted with pneumonia, typhoid fever, rheumatism or any nervous affection. With this remarkable record of immunity to disease, she married during her 20th year. Her health remained good only two months after marriage. About this time, a pain developed in her right ovarian region. Simultaneously menstraution ceased, and she became aware of incipient pregnancy. Throughout the course of this pregnancy, she suffered more or less with this pain, and an inability to do manual labor. She tried or less with this pain, and an inability to do manual labor. She tired easily, and never felt well. Late in the pregnancy, she noticed a furrow running obliquely from the left upper quadrant of the abdomen through the umbilical region to the lower right quadrant. Fetal movements always gave severe pain, which she located in abdominal walls and back.

She suffered with no leucorrhoea and her ankles did not swell. The children were carried to full term.

Whether true or not, the patient gave this piece of family history. Six years ago her sister at the close of her first pregnancy, gave birth to a child and died before a second child could be delivered.

Present Distress. Patient stated that two days ago, she gave birth to a child, the labor lasting 16 hours, suffering was not severe, and the parturition was attended with but moderate loss of blood. The placenta was expelled without interference in less than an hour after the birth of the child; but its expulsion failed to reduce the abdominal distension. The birth removed the furrow, but left the belly as large as before so far as she could see and judge. It was only after two days of vain efforts at reduction of this enlarged abdomen that she consented to call in medical aid.

Physical Examination. The patient was lying quietly on her back with lower extremities slightly flexed, her most comfortable position. Her eyes were bright, her mind clear, tongue furred, breath foul, appetite diminished, abdomen tensely distended and hyperesthetic, limbs plump, and ankles free from edema. Bowels and bladder were both performing their functions. Temperature was 99 degrees F., pulse 100, and respiration 24. Palpation of belly revealed the presence of an oblong body extending obliquely from the upper left quadrant of the abdomen to the lower right quadrant. Hyperesthesia of abdominal walls was so marked as to prohibit anything but a superficial examination. At a point midway between the umbilicus and the middle of a line joining the spinous processes, in the right lower quadrant, could be heard distinctly the fetal heart-beat—140 a minute, while between the umbilicus and liver, the placental souffle was constantly in evidence. Fetal movements were both visible and palpable, and every movement gave rise to severe pain; sometimes causing the patient to cry out. These pains, once started would last several minutes, then disappear, leaving the woman comparatively easy. Though only two days since the birth of the first child, the lochial discharge had entirely ceased, there being not enough blood left in the vaginal tract to more than faintly tinge the examining finger. The walls of the vagina were soft, flabby and folded, while the cervix was firm and its canal so contracted as to deny admittance to the tip of the fourth finger.

Hyperesthesia preventing thorough examination both externally and internally, no diagnosis was made, but the opinion was advanced that the case was either a twin pregnancy in a horned uterus, with different dates of inception or else extra-uterine, and expectant treatment was advised.

The patient's condition remained unchanged three days, but the following day—the 6th since the birth—she was seized with violent pains in her back and right side. These pains were described as "drawing," and while, constantly present, were subject to exacerbations. In searching for the cause of this painful state, no change in her condition could be discovered, save a distended bladder whose contents had not been evacuated for twelve hours, and a firmer and smaller cervix. Catheterization gave partial re-

lief, complete relief not being obtained until a quarter-grain tablet of morphine was given hypodermically.

Two days later, the side pain was renewed with increased severity, and the pulse accelerated to 120. The next 24 hours witnessed a further increase of symptoms—the side pain giving place to a general aching, the temperature rising to 100.5 degrees F., the pulse running to 130 and irregular, respiration about 26, and patient thirsty and asking to be fanned. No change could be noted in the position of the foetus. Eliminant treatment was resorted to, and the following morning the patient was improved—pains being milder, aching almost gone, pulse five beats slower and regular. Improvement continued throughout the succeeding week. Friday—the 15th day since the birth—she was doing remarkably well; her pains being insignificant, pulse 100, and temperature 99.5 degrees F. Examination, on this date, failed to detect either fetal movements or heartbeat, and absence of placental souffle was noted. The patient's statement that she felt no movements since the preceding Tuesday points to that day as the date of fetal death.

The fetus being dead, examination under anesthesia was advised. Upon acceptance of this advice, Drs. May and Carmichael, of Bennettsville, were called in consultation. Our opinions concurring the patient was anesthetized, the cervix dilated and uterine cavity explored. The examination revealed an empty cavity with walls so firmly retracted as to render it impossible to locate the fetus through them. The consequence of this investigation was that the diagnosis of extra-uterine pregnancy was definitely made, and an operation decided upon. The next day, the 18th since the birth of the intra-uterine child and the sixth since the death of the extra-uterine baby—the operation was performed by Drs. Carmichael, May and Crossland, of Bennettsville, and myself, with the result that the patient died. The details of the surgical procedure are described in an accompanying paper by Dr. Carmichael, hence their omission at this juncture.

As an aid to the proper classification of the extra-uterine feature of this case, the following points may be noted:

1. There is no history of previous uterine, tubal, or ovarian disease.
2. There is no history of tubal rupture or any internal hemorrhage during the course of the pregnancy.
3. Both children went to full term.
4. There was a constant pain in right side from the beginning of pregnancy.
5. Fetal movements always gave rise to severe pain.
6. Operation showed entire disconnection between the gestation sac and any part of uterus or appendages.

With these facts in mind, the possible conclusions are, (1) primary abdominal pregnancy, or (2) secondary abdominal pregnancy subsequent to very early tubal abortion, or (3) secondary abdominal pregnancy following early rupture of primary ovarian pregnancy.

REPORT OF A CASE OF PNEUMONIA.*

J. B. Hughey, M. D., Greenwood, S. C.

On Dec. 31st, 1909, at four o'clock p. m. I was called to see Mr. E. C. a young man of sixteen or seventeen years. His face was flushed, eyes red and bloated, expression anxious, respiration 40 to the minute, pulse full and very rapid, 140 as near as I could make it, temperature 104 degrees.

He was very hoarse and complained of pain over the whole chest. In a pan by the bedside were two large lumps of hard, tough mucus with the history of many before, with the appearance of being thoroughly mixed with coal dust. He had been sick all day not having been up since the night before, but did not give the history of a chill. His mother had the whole chest covered with flannel saturated with turpentine. This I ordered continued to the point of extreme redness of the skin.

I immediately gave calomel and podophyllin of each 1-3 gr. bilein 1-4 gr. to be repeated at five and six o'clock; followed one hour later by one-half ounce of oleum ricini. I also began at once the 1-134 gr. of aconitine every half hour.

About eight o'clock a. m. Jan. 1st, 1910, I was requested to see the patient as soon as possible. I saw him at eight-thirty with practically no change in his condition; the bowels had moved freely, the stools being dark and of very offensive odor. He had been very restless during the night. I repeated the same dose of calomel, podophyllin, bilein and oil as on the previous day. I added to the acontine, digitalin 1-67 gr. and veratrine 1-134 gr. to be given every half hour as before. At one o'clock the temperature was 103 degrees, respirations thirty-five and pulse about one hundred and thirty per minute. Rales were to be heard over right lung and expectoration was more frequent, consisting of bloody mucus. There was present some delirium and had been during the night and forenoon. He complained very much of headache. The bowels had not moved since early morning. I gave 20 grs. bromide sodium to be repeated in one hour if needed for the headache. The aconitine, digitalin and veratrine were continued.

At four p. m. the bowels had moved several times, but the temperature was 103 2-5 degrees, respiration and pulse about the same. No rales were to be heard over the lower right lobe and percussion gave the dull sound. The cough and expectoration was a little more frequent, the sputa bloody. A cantharidal plaster 3x4 inches was put over the lower right lobe. The aconitine, digitalin and veratrine was continued every twenty minutes with instructions to lengthen the time between doses should perspiration set in. At nine p. m. the temperature was 101 degrees, skin moist, pulse soft and breathing for the first time easy. The cough was but

*Read at the Third District Medical Society meeting at Abbeville, S. C., Jan., 1910.

little painful and expectoration easy and more copious. The sputa was bloody still. The aconitine, digitalin and veratrine was continued at one to two hours as needed to keep skin moist and pulse soft. Sulphate strychnia 1-60 gr. was given every four hours. Bromide ordered to be given if needed for restlessness and twenty or thirty drops of Camph. T. Opis to quiet cough. At nine-thirty a. m. Jan. 2nd, the patient was quiet and for the first time desiring nourishment. The temperature was 101 2-5 degrees, pulse and respiration satisfactory. The sputa was cream-color, there having been no blood since early morning. A few coarse rales were to be heard, but the whole chest was resonant on percussion. The previous night had been restless, cough irritating and expectoration copious, evidenced by a paper box shown me. The bromide and paregoric had been overlooked entirely by the nurse.

Thinking the amount of temperature was caused by the bowels not having moved since the afternoon before I ordered a tablespoonful of sulphate magnesia given. The strychnine was continued every four hours and the deffervescent two or three hours if needed. At four p. m. the bowels had moved copiously, the temperature was 100 degrees, the pulse 73, respiration 18, and the whole lung clear. Appetite was now forging to the front. Strychnine and nourishment only was continued.

At ten a. m. Jan. 3rd, I learned that the patient had slept soundly all night except when aroused. But at this time was complaining of nausea and pain over the stomach. He had begun to feel the nausea soon after taking nourishment at breakfast time and had vomited twice a dark green fluid, very bitter to the taste. The temperature was 101 degrees. This indicated to me fermentation and renewed toxaemia. Four 1-2 gr. powders of calomel were given hourly, dropped under the tongue and all nourishment stopped. At four-thirty the patient was free of fever and propped up in bed, wanting to eat. The bowels had moved well and all nausea had left him some hours before. The strychnine was continued and caution given as to diet.

Having occasion on my rounds the next day, Jan. 4th to pass the house I stopped to see him. He was doing well in every way and desired to sit up. I advised him to wait until the next day. Again passing the house the next day, Jan. 5th, I found him dressed and sitting by the fire.

Dr. Osler says: "Pneumonia is a self-limited disease, which can neither be aborted nor cut short by any known means at our command."

With due apology to Dr. Osler my experience teaches me that pneumonia is not a self-limited disease, but can be aborted (rather prevented) and cut short by well known means at our command.

The story has never been told and never will be of the lives sacrificed by heeding the advice of good-meaning but poorly informed family physisians to await developments, for at the present time there exists only a single curative measure for any type of tumor of the breast—operative.—Maryland Medical Journal.

REPORT OF A SPORADIC CASE OF PELLAGRA.*

John Lunney, M. D., Darlington, S. C.

On the 11th day of August last I was called to see Mrs. S., a young white married woman of nearly 23 years of age. She had had two children at full term and one premature labor. The children that came to full term died in infancy.

She was afflicted with a very mysterious disease, never having seen anything like it in a practice of over 40 years.

Symptoms. On a careful examination of the case I found a cutaneous eruption of a chronic inflammatory character strongly resembling a bad case of eczema. There was a squamous eruption on the forehead and under the eyes extending down to the nostrils, the nasal passages were ulcerated and inflamed, the mouth and tongue were also ulcerated and inflamed, the latter presenting a strawberry red appearance, she frequently exporated a blue foamy watery discharge with occasionally a little blood and what she called "small scabs." There were multiform lesions of a bright red color with irregular pale spots interspersed with small vesicles, pustules, scabs and crusts extending around the neck, upper part of the chest, down to the mammary glands, the shoulders, arms, forearms and backs of the hand presented symmetrical lesions as above described; minute quantities of pus exuded from beneath the small scabs. The skin was much rougher in appearance than coarse sandpaper. On account of the severity of the cutaneous lesions the patient had to sit up in a rocking-chair night and day. There was also an eruption of small purpuric spots and fine scaly spots also on the lower extremities.

Diagnosis. The symptoms did not correspond with any of the various skin diseases with which I was familiar. I compared them with eczema rubrum, impetigo contagioso, lichen plunus, etc., and eventually arrived at a diagnosis of pellagra by exclusion.

The disease first appeared as a scaly eruption on the backs of her hands in May last after exposure to the light and air in putting out some plants in her garden, and gradually extended upward. There was marked nervous depression, amounting to melancholia which persisted to the end, the case terminating fatally on Sept. 1st, 1909, notwithstanding my best efforts to save her.

Etiology. The etiology of the disease is still a matter *sub judice.* In this country the disease is comparatively new. For a long time it was only known in Italy, France, Spain and other southern European countries, but recently quite a number of cases have been met with in South Carolina, North Carolina, Tennessee, Florida, Texas and some of the Northern and Western States.

*Read at the meeting of the Darlington County Medical Society, Sept. 30, 1909.

Dr. J. W. Babcock, (a distinguished physician and scientist,) Superintendent of the State Hospital for the Insane, was the first to recognize the disease in this country. He together with Dr. J. J. Watson recently visited Italy for the purpose of studying pellagra, and to their labor we are indebted for a clearer insight into the disease. The researches of Dr. C. H. Lavinder of the Public Health and Marine Hospital Service of the United States have also thrown a great deal of light on this dreadful malady.

The disease was formerly supposed to be caused by spoiled maize, but there are evidently other contributory causes which as yet are not fully understood.

Treatment. The treatment consisted of light nutritious diet, stimulants, tonics of lactopeptine, quinine, iron, strychine and arsenic, glycothymoline as a nasal douche, gargle and mouth wash.

When I first saw this case her neck, shoulders, arms and hands were covered with a layer of black gunpowder which I found considerable difficulty in removing with castile soap and warm water, followed by liquid green soap, peroxide of hydrogen, etc. The remedy that relieved the cutaneous lesions and itching best consisted of linseed oil, and lime water equal parts with forty drops of carbolic acid to the pint of the above mixture. Boric acid was also used freely in powdering the surface.

While treating the case above referred to I was called upon to prescribe for her sister, Mrs. B., a young married woman not 19, residing in the same house, whose hands and forearms were affected with a slight squamous eruption which I believed to be incipient pellagra. She was gloomy and depressed and was evidently suffering from neurasthenia. When strangers entered the house she would step out of the back door and remain away till they retired. It was difficult to get her to see me when I called.

The important part that the University of Michigan has taken in the educational development of this country is shown by a quotation from Charles Kendall Adams: "One of the normal methods of advance seems to be for the University of Michigan to devise some new educational variation, or return to some old European standard, and then, after it has demonstrated its success, pass it through Harvard, as civilization is passed through France. It can then be proclaimed as the ripe fruit of the oldest and most renowned of American universities."—Journal Michigan State Medical Society.

Medical Student: "What did you operate on that man for?" Eminent Surgeon: "Two hundred dollars." Medical Student: "I mean what did he have?" Eminent Surgeon: "Two hundred dollars."

Journal of the South Carolina Medical Association.

FLORENCE, S. C.

PUBLICATION COMMITTEE.

Dr. O. B. Mayer, Newberry, S. C., Chairman.
Dr. F. M. Dwight, Wedgefield, S. C.
Dr. J. T. Taylor, Adams Run, S. C.

Dr. F. H. McLeod, Florence, S. C., Editor.

EDITORIALS.

Attend the Laurens meeting. Never mind how busy you are, you will find that your patients can die or get better as well in your absence, as if you remained to assist their passing on.

* * * *

What has become of the county secretaries? We want to hear from them. We need their reports in our business.

* * * *

Nearly every medical journal contains an article on the diet in typhoid fever, the diet in tuberculosis, or what not. At the present time, with the high price of food staring us in the face, we are greatly concerned about the diet in the absence of these diseases.

* * * *

It is often said, by the general practitioner, that the specialists monopolize the program at the State meetings. We trust that at the Laurens meeting, the former will show their resentment practically, by reading papers themselves.

* * * *

If you have any interesting cases to report let us hear about them at Laurens.

* * * *

The program committee will tell you that while we have a number of good papers for our next meeting, there is always room for one more.

Speaking of the much abused specialists, one would do well to remember that if it were not for them, our program would look as dry as a prohibition county where the law is enforced—if any such county really exists.

We are not sure, having never really been interested in such matters, whether Laurens is in the "dry column" or not, but we believe that we are safe in assuring the prospective attendants of the association meeting, that it is not necessary to be a camel in Laurens.

In the *Therapeutic Gazette* for January, Dr. Robert G. Torrey, of Philadelphia, calls attention to the importance of the treatment of the gastric complications of the earlier stages of pulmonary tuberculosis.

He says: "The result of the study of the stomach contents in early stages of the disease has shown in general that secretion may be normal in amounts and in the acid content, but an increase in acid or in quantity of gastric juice secreted is unusual, and that in the main the quantity of secretion, the amount of acid, and the motive power in the stomach are all reduced. Fever has a marked inhibitory effect on the gastric function."

Dr. Torrey dwells on the importance of regular examinations of the stomach contents, and of appropriate treatment directed to this organ. "While the tuberculosis specialist may protest that rest, milk, eggs and fresh air will accomplish all that is possible in this condition, it still seems reasonable," thinks Dr. Torrey, "to contend that the milk and eggs can offer more immediate aid to the general economy if a little well-timed help be offered to the jaded stomach."

In this condition the writer finds that the tincture of nux vomica in doses ranging from ten to twenty drops, either alone or in combination with gentian is of value. He does not apparently think much of creosote, in which opinion we most heartily concur. When the acid contents is deficient he uses the dilute hydrochloric acid, in doses up to twenty to thirty drops, which seems rather more than we are accustomed to prescribe.

That we are all prone to fall into routine in our treatment of these cases is most probable, and as we all recognize that a phthisical patient's only salvation is his stomach, it behooves us to keep that organ in the best possible condition, therefore it occurs to us that Dr. Torrey's suggestions are quite timely.

ADMINSTRATION OF OXYGEN IN HIGH PERCENTAGE.

The *British Medical Journal* of September 25, 1909, contains an article by Moore in which he states that the usual methods of administering oxygen by delivering it from a steel bottle in a constant stream into a tube or funnel or open mask are so wrong in principle as to be practically useless, and it is questionable whether the patient ever gets a mixture containing more than a few per cent of oxygen above the atmospheric amount, nearly all the oxygen escaping into the air of the room.

The nature of the respiratory process is such that the patient does not require a continuous stream of oxygen bubbling out at or near the mouth, but rather a plentiful reservoir to breathe from rapidly each time he draws his breath. An apparatus based on this principle for continuous administration of a high percentage of oxygen is exhibited. It consists of a collapsible holder, or gas-bag, sealed off from the air below by a water seal, and having in its base four large circular trays containing lime slaked with caustic soda for uptake of carbon dioxide during the breathing. The bag

caustic soda for uptake of carbon dioxide during the breathing. The bag is first filled with oxygen, either made from potassium permanganate or obtained from a steel gas cylinder. The patient then simply breathes backward and forward into the bag through an air-tight mask and a very wide tube. There are no valves to obstruct the breathing, and the carbon dioxide is completely taken up by the soda lime. No discomfort whatever is felt in using the apparatus, nor any difficulty in breathing.—Therapeutic Gazette.

A NOTICE FROM THE STATE SECRETARY.

To All Secretaries Elect, of The County Medical Societies:

I am just in receipt of a letter from our State Treasurer, stating that a good many Counties have not paid their dues. For the information of the County Secretaries, I wish to quote the following from the Constitution of our State Association.

Page 15, Sections 13 and 14.

"Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates and list of non-affiliated physicians of the county, to the Secretary of this Association each year, thirty days before the Annual Session.

"Sec. 14. Any county society which fails to pay its assessment, or make the report required, on or before April 1, of each year shall be held suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met."

The habit of waiting to pay the dues until the County Treasurer comes to the Annual Meeting, is not a good one and entails many troubles to both the Secretary and the Treasurer. We will ask you kindly to comply exactly with the Constitution so that our business affairs may be ended before the meeting, and we will know the exact membership and the exact amount of finances that we have on hand. If the County Secretaries will do this within the next three days, it will be esteemed a great favor by these officers and help us to perform our duties properly.

WALTER CHEYNE,
Secretary S. C. Medical Association.

INCONTINENCE OF URINE.

Dr. White's formula is: Sodii Benzoatis, Sodii Salicylatis aa grn. xv. Ext. Belladonnae grn. x. Aq. Cinnamomi iv. M. Sig.: A teaspoonful four or five times a day.—Medical Fortnightly.

DEPARTMENT

OF THE SOCIETY OF MEDICAL SECRETARIES, SOUTH CAROLINA MEDICAL ASSOCIATION.

DR. ALLEN J. JERVEY, Charleston, Chairman.
DR. MARY R. BAKER, Columbia, Vice-Chairman.
DR. L. ROSA H. GANTT, Spartanburg, Sec. and Treas.

SOME OF THE DUTIES OF COUNTRY SECRETARIES.

W. J. Burdell, M. D., Lugoff, S. C.

In writing of the duties of county secretaries, one is also writing of the duties of members of the county societies, for aside from the clerical work of the office of secretary, the members of the society should work with the secretary and assist him. It is not so very often that this is the case however, I fear. It is of those duties, or rather a few of those duties, in which the whole membership should take part, that I shall try to write.

First: The county secretary should keep in touch with the State secretary, and through him with the national secretary, and he should bring up for discussion in his society those matters that are suggested for discussion or action by the national body. For instance, how many of our county societies have held open meetings as suggested by the Bureau of Legislation of the A. M. A.?

The county secretary should endeavor to keep himself posted as to matters of a legislative nature that are pending, and should bring such matters before his society in time to have the society invite the legislative delegation from his county to meet with the society and hear the discussion of these matters from the doctors' standpoint.

The profession in this State and the general assembly, do not seem to be able to get together, and there seems almost that there is antagonism. The principal cause of this is that the medical profession usually waits until the assembly is in session to advocate any measure that it wishes enacted, and then it begins to work. Let the profession decide upon what it wishes at the annual meeting, and then let each secretary go home determined to bring these matters up in his society and have the legislative delegation present to hear the discussion. Legislators go to Columbia as a rule, with a program made up, and they have no time to study new matters while in Columbia. Let each county work its own delegation and we will get results.

Second: Brother secretaries, what are we doing in the fight against

tuberculosis? Why do not we work with the man appointed in each county by the State Association and whoop up the fight against tuberculosis? How many counties are there that have done anything in this matter? Let us get busy. We should be having at least one public meeting for the purpose each year.

Third: Can not each secretary arrange a meeting once each year, to which the public is invited, at which meeting there can be a discussion of the means of preventing the spread of the transmissible diseases other than tuberculosis, and also a few remarks concerning faulty vision, adenoids, and defective hearing? Call such a meeting, and assign a topic for each member of your society, or if you have a large membership, assign essayist and let the others join in the discussion. I very much fear that the average physician in South Carolina does not measure up to the same standard in measures prophylactic, that he does in diagnostic and remedial measures. Surely there can be no doubt that prophylaxis is as important as cure. These public meetings would act as a spur to many of us.

Fourth: Can not we have a meeting of our societies in which the venereal peril can be discussed. So far as I know this matter has been discussed by Dr. Guerry in his able address at Anderson, by Dr. Whaley in his committee report in Summerville, and I think that two county societies have discussed it, and two papers on the subject were read at the meeting of 4th District Society at Easley. To the student of statistics, the black plague assumes an importance barely second to the white plague. Hookworms and pellagra are scourges and I would never say let up in our fight against them, but they are minor matters when we consider the venereal diseases.

In the past, and not so very distant past at that, the doctor was very secretive concerning his peculiar knowledge. Then came the period when secrecy among ourselves was unethical, but not so much so as it was to the the laity what we knew. The time is here when we must make public our knowledge as to the prevention of disease. The time has come when the doctor must be a teacher indeed. Public discussions of public health matters in an ethical manner is the line toward which we must turn. Surely there is no one in a better position to start this campaign than the county secretaries.

SOCIETY REPORTS.

SPARTANBURG.

L. Rosa Gantt, M. D. Secretary.

The January meeting of the Spartanburg County Medical Society was not very well attended on account of the inclement weather but those who

were present enjoyed the reading of a paper on Neurasthenia by Dr. D. Lesesne Smith and entered freely into the discussion of same.

Drs. B. B. Steedly and James H. Hunter were received into the society as members.

Resolutions on the death of one of our members, Dr. S. T. Lanham were adopted.

The Society approved of the proposed changes to be made in the constitution at the next meeting of the State Association as suggested by the Charleston Medical Society.

The Third District Medical Society, consisting of Abbeville, Laurens, Greenwood, Newberry and Saluda counties, met here on last Friday, January 21st.

The officers of the Society are: Dr. G. A. Neuffer, President; Dr. G. P. Need, Secretary and Treasurer, and Dr. Rolph E. Hughes, Vice President.

Those present at the District meeting were:

Newberry—Dr. O. B. Mayer and Dr. Kibler.

Greenwood—Dr. Epting, Dr. Hughes, Dr. Jno. Lyon, Dr. Swygert.

Laurens—Dr. Young, Dr. Pinson, Dr. Owens.

Abbeville—Dr. C. C. Gambrell, Dr. Simpson, Dr. J. A. Anderson, Dr. Britt, Dr. Knox, Dr. Wilson, Dr. Black, Dr. Kellar.

In the absence of the officers, Dr. Epting was chosen to preside at the meeting, and Dr. Gambrell was appointed to act as Secretary and Treasurer.

After the formal business was disposed of, papers were read by Doctors Hughes of Greenwood, Mayer of Newberry, and Swygert of Greenwood on the subject Pneumonia. The papers were discused by Doctors Kibler, Lyon, Gambrell, Britt, Simpson, and Wilson.

It seemed the consensus of opinion of the doctors is that less improvement had been made in the treatment of pneumonia than in probably any other disease; that today equally as good results are obtained from the use of the old fly blister and Norwood's tincture of veratrum as by any other means.

Dr. Mayer in his paper emphasized the fact that in the near future the serum theory therapy, will have been so far perfected that we would be using pneumonic serum to prevent as well as cure the disease. He also recommended very highly the use of fresh air in the treatment of pneumonia. A pneumonia patient should be placed on a piazza, out of the wind, protected properly from exposure, and the patient will then recover much quicker than if shut up in a close room.

Not many know that Dr. Norwood who lived at Cokesbury, Abbeville county, was the discoverer of Norwood's Tincture of Veratrum spoken of in Dr. Mayer's article.

Dr. Norwood discovered this article before the war of Secession,

turned its manufacture and sale over to Quakers in Pennsylvania, and during the war he received no returns; but after the war, these same Quakers rendered an account to Dr. Norwood of the veratum sold and paid him his full share of the gains, thereby making Dr. Norwood independently rich. So much for honesty.

PERSONALS.

Dr. J. Sumter Rhame, whose native town is Camden, but who has made Charleston his home for the past five years, has returned to the city after a brief visit to the interior of the State.—News and Courier.

* * * *

Dr. C. F. Williams, secretary of the State board of health, has returned to the city from Ninety-Nine Islands, where he went to investigate the smallpox situation.—The State.

* * * *

Dr. William Weston, of Columbia, delivered an able address before the Union County Medical Society January 24th, his subject being "The Hookworm."

* * * *

Dr. Burgess and family of Summerton have moved to Fort Motte.

* * * *

Dr. Joseph Evans has just returned from Panama, where for several years he has held an important position in the medical department of the canal zone. Dr. Evans recently resigned his position on account of his health, and he will probably make Marion his home after his return from Jacksonville.

* * * *

Dr. W. M. Love and family, formerly of McConnellsville, York county, have moved into the handsome home recently purchased by Dr. Love on Pinckney street, Chester. With the coming of Dr. Love Chester has now eight white practitioners of medicine.

* * * *

Drs. J. H. Allen and W. B. Lyles, of Spartanburg have been appointed Division surgeons for the C. C. & O. Railroad.

* * * *

Dr. L. Rosa H. Gantt, of Spartanburg, has been appointed Secretary for South Carolina, of the Public Health Education Committee of the American Medical Association, this committee being composed of the women members of the A. M. A.

* * * *

Dr. T. D. Foxworth, of Lee county, has located in McColl. With his family he is already occupying the C. S. McLaurin cottage on south Main street.

Dr. J. Leland Anderson who has been practicing medicine for the past year at Moore's, S. C., has removed to Greenville.

* * * *

Dr. J. E. Poore will sail from New York, on next Saturday for London, England. While there he will take a special course studying nervous diseases. Mrs. Poore will remain with her parents, Mr. and Mrs. L. C. Payseur, while he is absent.

* * * *

Dr. T. H. Dreher has returned from Rochester, Minn., where he has been pursuing a six weeks' special course of study.

* * * *

Dr. Britt, of Troy, has recently located at Princeton and is receiving a cordial welcome from the citizens of that section.

* * * *

Dr. C. N. Wyatt attended the hookworm co vention in Atlanta this week.

* * * *

Dr. J. D. Long, passed-assistant-surgeon and a member of the national pellagra commission, will pursue special studies of pellagra in Columbia during the coming summer according to a letter received yesterday by Gov. Ansel from Walter Wyman, surgeon-general. Dr. Long will be associated with Dr. Babcock, who has done such valuable work in the study of pellagra. The clinical room at the State Hospital for the Insane will be used for the work.

OBITUARY.

DR. B. H. PADGETT.

Walterboro, Jan. 9.—Dr. B. H. Padgett died at his home here today in the 54th year of his age. Dr. Padgett had been for years a sufferer from bronchial asthma. He went to his farm a few days ago where he contracted a cold which developed into pleurisy, from which he died. The funeral will take place from his late residence tomorrow at 11 o'clock and the interment will be in Live Oak cemetery. He is survived by a wife and six children.

Dr. Padgett had been a resident of this place for 25 years, where he at one time ran a drug store in connection with his practice. This he gave up on account of poor health and devoted himself to farming. He had twice been intendent of the town and was also warden for a number of years. He was a Mason and a member of the lodge of Knights of Pythias and a member of the Baptist church.

DR. JAMES R. FOWLER.

Laurens, Jan. 14.—Dr. Jas. R. Fowler, a prominent physician of the county was buried at Warrior Creek church yesterday afternoon, his death having occurred the day previous. Dr. Fowler was a brother of John W. Fowler of Laurens and of Dixon Fowler, of Spartanburg county. He is survived by his wife, who was a Miss Meredith, and several children.

The deceased was a faithful soldier, serving during the latter years of the War Between the Sections. He was a member of Company E, Third South Carolina battalion, of which his father, William Fowler, was at one time captain.

DR. H. H. GARNER.

Darlington, Oct. 9.—The sad intelligence of the recent death of Dr. Hammond Hampton Garner, originally of Darlington, in the city hospital of Santos, Brazil, has just reached here.

Dr. Garner was just 31 years of age, having been born and reared in Darlington. After graduation from the University of the City of New York he began the practice of his profession in his native home. Soon thereafter his health became so impaired it was necessary for him to seek a higher and drier climate. He finally settled in Brevard, N. C. After several years he removed to Hendersonville and Toxaway, where he remained until 1908. Then he was elected physician and surgeon on the ship Dextero, sailing between New York city, the West India Islands and Hamburg, Germany. There he remained till the latter part of July, when on this long voyage he became ill and was placed in the hospital at Santos, where he entered the last long sleep.

Though a stranger in a distant land, yet the human heart is the same the world over, and there he received the tenderest care and consideration. The home of his relatives was unknown to officers of the vessel and hence no knowledge of his sad demise reached here till the return of his vessel to New York. His body will be brought home as early as practicable.

Dr. Garner was a member of one of the oldest and best known families in the State. He is survived by two brothers, Dr. J. Samuel Garner of Darlington and Dr. Wightman W. Garner of the bureau of chemistry, Washington, D. C.

A properly fitting stocking is as important as an appropriate shoe in the management of cases of bunion. As suggested by Dr. Bauman, the stocking should be light, loose and be made with a separate compartment for the big toe.—Medical Standard, November.

Sumter, S. C., March 15, 1910.

Editor South Carolina Medical Journal:

Dear Sir:—I would ask you to print both sides of this enclosed blank, which has been sent out to all the Secretaries of the Societies of each County in the State. Certain of these Secretaries, some newly elected, not having had turned over to them this blank, have not made the proper reports to the State Secretary's office. If they will take this page and fill it up in ink or pencil, if they have not already done so, and send it to the State Secretary's office, it will help largely to give us a perfect roll.

Very truly yours,

WALTER CHEYNE,

Secretary South Carolina Medical Association.

SOUTH CAROLINA MEDICAL ASSOCIATION.

Report of the Secretary of.....County Medical Society to the State Association for 19 . Made in compliance with Section 12, Chapter IX of the By-Laws.

Officers—President, Dr. .....; Vice-President, Dr. .....

Secretary-Treasurer, Dr. .....

Delegate, Dr. .....

Board of Censors, Drs. .....

ROLL OF MEMBERS.

NAME.	P. O. ADDRESS.	COLLEGE.	Date of Graduation	Date of License	REMARKS.

PHYSICIANS IN.....COUNTY NOT MEMBERS.

NAME. P. O. ADDRESS. COLLEGE.	Date of Graduation	Date of License	School or System of Practice	REMARKS. Eligible or non-eligible for Membership

....., S. C.,.....19

DR. WALTER CHEYNE, Sec'y South Carolina Medical Association, Sumter, S. C.

Dear Doctor:—So far as possible I have verified the facts contained in the above report, both as to members and those not affiliated with the Society, and believe them to be correct. I have filed a copy of this report with my records for reference in future years. Very respectfully,

.....

Secretary.....County Medical Society.

NOTE.—Please read carefully.—It is important that this report should contain the same accurate data for non-members as for members, and that each physician in the county should be accounted for, as these reports from the various county societies will be used in compiling future editions of the American Medical Directory, issued by the American Medical Association. Most of the facts required for this report can be obtained from the county clerk, if they can not be had from the individual.

SOUTH CAROLINA MEDICAL ASSOCIATION.

Next Annual Meeting at Laurens, S. C., April 20, 1910.
House of Delegates Convenes April 19, at 2 p. m.

District No. 1: Charleston, Berkley, Dorchester, Colleton, and Beaufort. Councilor, Dr. J. T. Taylor, Adams Run, 1911.

District No. 2: Orangeburg, Bamberg, Lexington and Calhoun. Councilor, Dr. W. P. Timmerman, Batesburg, 1910.

District No. 3: Saluda, Newberry, Greenwood, Laurens and Abbeville. Councilor, Dr. O. B. Mayer, Newberry (Chairman of Board), 1911.

District No. 4: Anderson, Oconee, Pickens, Greenville, Spartanburg, and Union. Councilor, Dr. J. F. Wiliams, Roebuck, 1912.

District No. 5: Cherokee, York, Chester, Fairfield, Lancaster and Kershaw. Councilor, Dr. W. B. Cox, Chester, 1910.

District No. 6: Chesterfield, Darlington, Florence, Marlboro, Marion, and Horry. Councilor, Dr. William Egleston, Hartville, 1911.

District No. 7: Richland, Sumter, Clarendon, Williamsburg, Georgetown and Lee. Councilor, Dr. F. M. Dwight, Wedgefield, 1910.

District No. 8: Barnwell, Aiken, Edgefield, and Hampton. Councilor, Dr. T. G. Croft, Aiken, 1912.

Officers

President, John L. Dawson, M. D., Charleston.

1st Vice-Pres. F. H. McLeod, M. D., Florence.

2nd Vice-Pres. C. M. Rees, M. D. Charleston.

3rd Vice-Pres. A. H. Hayden, Summerville.

Treasurer, C. P. Aimar, M. D., Charleston.

Secretary, Walter Cheyne, M. D., Sumter.

TABLE OF COUNTY SOCIETIES AND OFFICERS.

Where information is wrong or lacking in the columns below County Secretaries are urged to supply it correctly to the Secretary without delay:

County.	Secretaries.	Addresses.
Abbeville	C. C. Gambrell	Abbeville, S. C.
Anderson	W. Frank Ashmore	Anderson, S. C.
Aiken	Harry H. Wyman	Aiken, S. C.
Bamberg, (1909)	J. J. Cleckley	Bamberg, S. C.
Barnwell	No Society	
Beaufort, (1909)	M. B. Cope	Port Royal, S. C.
Charleston	W. Cyril O'Driscoll	Charleston, S. C.
Cherokee	J. G. Pittman	Gaffney, S. C.
Chester	W. R. Wallace	Chester, S. C.
Clarendon	Chas. B. Geiger	Manning, S. C.
Chesterfield, (1909)	J. W. McCanless	Chesterfield, S. C.
Colleton, (1909)	T. G. Kershaw	Walterboro, S. C.
Darlington, (1909)	J. C. Lawson	Darlington, S. C.
Dorchester	John B. Johnston	St. George, S. C.
Edgefield	J. G. Edwards	Edgefield, S. C.
Fairfield, (1909)	Samuel Lindsay	Winnsboro, S. C.
Florence	Edward M. Allen	Florence, S. C.
Georgetown	J. LaBruce Ward	Georgetown, S. C.
Greenville	C. O. Bates	Greenville, S. C.
Greenwood	A. E. Mason	Greenwood, S. C.
Hampton, (1909)	C. A. Rush	Hampton, S. C.
Horry	H. H. Burroughs	Conway, S. C.
Kershaw	W. J. Burdell	Lugoff, S. C.
Laurens	Jesse H. Teague	Laurens, S. C.
Lee, (1909)	R. O. McCutchen	Bishopville, S. C.
Lexington	J. J. Wingard	Lexington, S. C.
Marion, (1909)	Z. Smith	Marion, S. C.
Marlboro	J. H. Reese	Tatum, S. C.
Newberry	Frank D. Mower	Prosperity, S. C.
Oconee	W. A. Strickland	Westminster, S. C.
Orangeburg-Calhoun	C. I. Green	Orangeburg, S. C.
Pickens	R. J. Gilliland	Easley, S. C.
Columbia, (Richland Co.)	Mary R. Baker	Columbia, S. C.
Saluda	J. D. Waters	Coleman, S. C.
Spartanburg	L. Rosa H. Gantt	Spartanburg, S. C.
Sumter	E. R. Wilson	Sumter, S. C.
Union, (1909)	R. R. Berry	Union, S. C.
Williamsburg	E. T. Kelley	Kingstree, S. C.
York	John I. Barron	Yorkville, S. C.

PRELIMINARY PROGRAM.

Sixty-Second Annual Meeting of

THE SOUTH CARLINA MEDICAL ASSOCIATION.

To be Held at

LAURENS, S. C.

19th, 20th and 21st of April, 1910.

OFFICERS AND COMMITTEES.

John L. Dawson, President, Charleston.
F. H. McLeod, 1st Vice President, Florence.
C. M. Rees, 2nd Vice President, Charleston.
A. H. Hayden, 3rd Vice President, Summerville.
Walter Cheyne, Secretary, Sumter.
C. P. Aimar, Treasurer, Charleston.

COUNCILORS.

1st District, 1911, J. T. Taylor, Adams Run.
2nd District, 1910, W. P. Timmerman, Batesburg.
3rd District, 1911, O. B. Mayer, Newberry.
4th District, 1912, J. F. Williams, Roebuck.
5th District, 1910, W. B. Cox, Chester.
6th District, 1911, William Egleston, Hartsville.
7th District, 1910, F. M. Dwight, Wedgefield.
8th District, 1912, T. G. Croft, Aiken.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

Walter Cheyne, 1910, Secretary Ex-officio, Sumter.
R. S. Cathcart, 1910, Charleston.
T. P. Whaley, 1910, Alternate, Charleston.
W. C. Black, 1910, Alternate, Greenville.

COMMITTEE ON ARRANGEMENTS.

W. H. Dial, Chairman, I. Schayer,
R. E. Hughes, T. L. W. Bailey.

COMMITTEE ON SCIENTIFIC WORK.

Walter Cheyne, Secretary Ex-Officio, Sumter.
Dr. J. T. Taylor, Adams Run.
Dr. W. A. Boyd, Columbia.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

President and Secretary Ex-officio,
Drs. Guerry, Weston and Boyd.

COMMITTEE ON THE PREVENTION OF VENEREAL DISEASE.

T. P. Whaley, C. W. Barron.
Davis Furman, President, Secretary Ex-officio.

COMMITTEE ON NECROLOGY.

Dr. E. A. Hines, Dr. T. A. Quattlebaum.
Dr. J. L. Folk,

ANNOUNCEMENTS.

Reduced rates will be granted to the bearer of certificate, duly countersigned by the Secretary of the Asociation and the Agent of the Railroad Company at Laurens, S. C. **Do not fail** to secure this blank properly filled out by your Local Agent.

Titles of papers to be read must be in the office of the Secretary not later than the first day of April, to appear upon the Final Programme.

Unannounced subjects will have no place on the Final Programme.

PROGRAMME.

The local hotels are: Gray's Hotel, Public Square, $2.50 per day. Winona Hotel, near the railroad station, $2.00 per day.

Council will meet 8 p. m. April 18th. The organization of County Secretaries will meet at 9 a. m., Tuesday morning, April 19th in the offices of Drs. Teague and Ferguson, Dial-Gray building. **Every Secretary** is requested to be present.

House of Delegates meets at 2 p. m. Tuesday, April 19th. Each Delegate is requested to present his proper credentials. It is desired that all business matters be disposed of on Tuesday so that the Scientific Sessions shall not be interfered with.

A motion regarding the election of officers amending the Constitution, which requires unanimous consent, will come up on Tuesday in the House of Delegates.

By-laws, Chapter 9, Sec. 11: "The Secretary of the (County) Society shall send a list of such Delegates to the Sec-

Call to order by the President.
Divine Invocation: Rev. W. E. Thayer.
Adress of Welcome: Dr. W. D. Ferguson.
Address of Welcome: Dr. H. K. Aiken, Chamber of Commerce.
Address of Welcome: Dr. W. H. Dial, Laurens County Medical Society.
President's Address: Dr. John L. Dawson.

retary of this Association at least ten days before the Annual Session.

All papers read are the property of the Association and are to be deposited immediately after reading, with the Secretary.

ORDER OF ENTERTAINMENT.

Lecture for the visiting Doctors and accompanying ladies at Graded School Auditorium, April 20, 8:30 p. m.

Buffet supper at the Armory, April 21, 10 p. m.

HOURS OF MEETING.

8 p. m. Monday, April 18: Meeting of the Council, at Gray's Hotel.

9 a. m. Tuesday, April 19: Meeting of County Secretaries.

HOUSE OF DELEGATES.

Meeting in Dial-Gray Building:
Tuesday 2 p. m. to 6 p. m.
8 p. m. to 11 p. m.
And at call of the President.

SCIENTIFIC MEETING.

Masonic Hall:
Wednesday 10:30 a. m. to 1:30 p. m.
3:30 p. m. to 6 p. m.
Thursday 10 a. m. to 1 p. m.
3 p. m. to 6 p. m.

HOUSE OF DELEGATES.

The House of Delegates will meet in the Dial-Gray Building, Tuesday, April 19th.

The General Order will be as follows:

Call to order by President at 2 p. m.

Appointment of Committee on Credentials.

Report of Treasurer.

Report of Secretary.

Report of Scientific Committee.

Report of the Comittee on Public Policy and Legislation.

Report of the State Board of Health.

Report of State Board of Medical Examiners.

Report of the Councilors:

First District, J. T. Taylor, M. D.
Second District, W. P. Timmerman, M. D.
Third District, O. B. Mayer, M. D.
Fourth District, J. F. Williams, M. D.
Fifth District, W. B. Cox, M. D.
Sixth District, William Egleston, M. D.
Seventh District, F. M. Dwight, M. D.
Eighth District, T. G. Croft, M. D.

Committee on Necrology.

Introduction of New Business.

Miscellaneous Business.

GENERAL SESSION.

Surgical and Medical:

Wednesday, April 20th 10:30 a. m.

Chairman, President, John L. Dawson.

1. "The Serum Treatment of Epidemic Cerebrospinal Meningitis."
Dr. Charles Hunter Dunn, Boston, Mass.
2.
3.
4. "The Uses and Limits of Antiseptics and Local Applications in Surgical Practice."
Dr. Chas. M. Rees, Charleston, S. C.
5. "The Hookworm Disease as it pertains to the Eye and Ear Specialty."
Dr. Leland Osgood Mauldin, Greenville, S .C.
6. "The Hookworm."
Dr. F. Julian Carroll, Summerville, S. C.
7. "Hookworm Disease in the Negro."
Dr. W. J. Burdell, Lugoff, S. C.
8. "First Aid to Injured Eyes."
Dr. Edward F. Parker, Charleston, S. C.
9. "A Report on What has Been Done for the Prevention of the Increase of Blindness." Stereoptican Slides.
Chas. W. Kollock, Charleston, S. C.
10. "Further Observations on the Proper Etiology and Treatment of True Catarrh."
Dr. Walter P. Porcher, Charleston, S. C.
11. "A Plea for Medical Inspection of School Children in South Carolina: Report of the Work at Seneca."
Dr. Edgar A. Hines, Seneca, S. C.
12. Subject Unannounced, Dr. R. S. Cathcart, Charleston, S. C.
13. Subject Unannounced, Dr. Legrand Guerry, Columbia, S. C.
14. "Gastric Atony."
Dr. F. M. Durham, Columbia, S. C.
15. "Traumas Following Gastric and Duodenal Ulcers."
Dr. A. B. Knowlton, Columbia, S. C.
16. "Appendicostomy."
Dr. H. R. Black, Spartanburg, S. C.
17. "The Office Specialist vs. The General Practitioner's Treatment of Gonorrhoea."
Dr. J. Alexander Meldau, Newberry, S. C.
18. "The Ideal Treatment of Tuberculosis."
Dr. Fillmore Moore, Aiken, S. C.
19. "Some Medical and Surgical Don'ts."
Dr. Walter Cheyne, Sumter, S. C.
20. "The Therapeutic Use of Alcohol."
Dr. Robert Wilson, Jr., Charleston, S. C.
21. "Treatment of Fractures of the Long Bones."
Dr. A. E. Baker, Charleston, S. C.
22. "A Report of a Case of Complete Bony Atresia of the Posterior Nares with Successful Operation.
Dr. E. R. Wilson, Sumter, S. C.
23. "Is the Family Doctor Passing."
Dr. Rolfe E. Hughes, Laurens, S. C.
24. "The Significance of Bacillus Coli."
Dr. Francis L. Parker, Jr., Charleston, S. C.
25. "Treatment of Diseased Tonsils."
Dr. Chas. B. Kollock, Charleston, S. C.

In connection with the so-called ophthalmo-tuberculin reaction we think we are stating the case fairly when we remark that the majority of ophthalmic surgeons are now distinctly opposed to the general employment of this test, since there are a number of cases on record in which very violent and even disastrous ocular changes have ensued. If the test is used and a positive result is found, it does of course possess diagnostic value, but it is important to remember that if tuberculin is dropped into the eye in minute quantity no reaction may develop, and when larger quantities are tried a positive reaction has no diagnostic import, since the earlier administration has produced a condition of hypersensitiveness which results in a positive test even if tuberculosis is absent.—Therapeutic Gazette.

It is reported by cable from Paris that a young scientist, Jean Commandon, has succeeded in making cinematograph records of active microbes. By means of an ultra-microscope with lateral light, photographs are taken at the rate of thirty-two per second and later magnified ten to twenty thousand diameters. Tripanosomes, magnified to the size of eels, are said to be seen gamboling gleefully amid the red cells of the blood. However accurate the statement that the value of these records to science can scarcely be exaggerated, the opportunities of the vaudeville for the amusement of physicians are greatly enhanced. After an evening's relaxation in watching the playful antics of his bacterial enemies the weary doctor may be stimulated to renew his daily crusade with greater zest, possibly with pleasure.—Colorado Medicine.

EMERGENCY CALL.

The golden-haired songbird had just bowed to her audience when a man rushed frantically upon the stage and cried:

"Is there a physician in the house?" A young man in the third row, blushing with embarrassment, arose.

"Say, Doc," asked the man on the stage, with a jerk of his thumb toward the singer, "ain't she a beaut?"—Everybody's.

The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, FLORENCE, S. C.

Entered as second-class matter June 2, 1909, at the Postoffice at Florence, S. C., under the Act of Congress of March 5, 1879.

ANNUAL SUBSCRIPTION, $2.00.

VOL. VI. MARCH, 1910. No. 3

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

Business communications relating to subscriptions and advertising should be addressed to

JOURNAL S. C., MED. ASS'N., FLORENCE, S. C.

ORIGINAL ARTICLES.

PREVEFTIVE TENDENCIES AND MEASURES IN MEDICINE.*

By Fillmore Moore, M. D., Aiken, S. C.

In the statement of purpose of this Association I find this clause: "To enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the people, in the prevention and cure of disease and in prolonging and adding comfort to life."

*Read before State Medical Association at Summerville, S. C., April, 1909.

In looking back over the programmes of the annual meetings of the Association, one is struck by the scarcity of papers bearing on prevention. So it seems very fitting that one paper at least, should be devoted to this subject.

There are, however, far weighter reasons for discussing this question than that of consistency and faithfulness to our profession of purpose. The health and happiness of the peo-

ple, and the capacity and honor of our profession are indeed involved, for no one who carefully considers either the welfare of the people, or that of the profession, can fail to realize that it is in the direction of prevention that we must look for progress, in both efficiency and in honor. Progress in the cure of disease consists almost wholly in anticipating the later and more direful stages and phases of disease, and therefore is a sort of prevention. The warfare that is now being waged against tuberculosis, yellow fever, bubonic plague and other contagious and infectious diseases, is but the first skirmish in the great wars that are to be waged against all forms of disease that affect mankind.

There are many indications that the era of superstitious acceptance and tolerance of disease, as inevitable, is passing, and thoughtful people everywhere are demanding of us that we shall tell them the cause of disease and the way of prevention. A bouyant hope is taking the place of fear and resignation, and we now hear on all sides the growing conviction that disease can be averted and that life can be made wholesome and good. We are glad to see that the medical profession is waking up and responding to this new faith and demand, but it has not yet taken the leadership which rightfully belongs to it.

There are two chief lines along which the progress in the discovery of the nature and origin of disease and the methods of prevention, is being made. One may be called the way of faith and the other the way of science. There has been a revival of faith, and the people have a new vision. Faith in the power of drugs to cure, even faith in the physician, is and has been on the wane. But that loss of faith is now being succeeded by a larger faith—a faith that the Father and Creator of man does not desire that His creatures should be sick and suffering, and that there has been a way provided, by following which they can escape and be well and happy. Many believe that way has already been discovered, and still larger numbers are in an expectant attitude of mind—are confidently looking for the way of escape and of salvation. This attitude of hope and faith and expectancy is a most valuable factor in human life. It is an almost indispensable one in dealing with disease. Let the patient be lacking in it and the best physician finds it difficult if not impossible to cure. The great Physician, Jesus, the Christ said, "Thy faith hath made thee whole." While faith and hope and expectancy are valuable adjuncts in the cure of disease, they are still more potent factors in its prevention.

But it is not on this phase of the subject that I will dwell at this time. That preventive medicine is to be the practice of the future, is being demonstrated by what is actually taking place *even now*. We have already referred to the efforts that are being made to prevent the spread of tuberculosis, etc. These organized and specific activities, while more striking and impressive, are by no means the only nor even the most significant movements that are on foot to-day. Perhaps at no previous time has there been so general and widespread an interest in the profession and among our people in all matters relating to health, as at the present. Not alone the question of general

saitation but questions of diet, ventilation, exercise and rest, clothing and housing, food and water supplies, out-door living and sleeping, methods of breathing, attitude of mind, influence of occupation, are all getting careful consideration, and there is a widespread and growing conviction that disease is not necessary and inevitable, and that health is the normal and right estate. A vast hope has spread and is spreading abroad over the land, and the time will come and now is, when physicians will be required to meet the question, "Why are the people sick, and how can they keep well?" and if we are not prepared to answer this question and meet the demand, we may be assured that they will pass us by and seek elsewhere for their answer.

We have said that there are two main lines along which progress in preventive medicine is being made, one, the way of faith, and the other is Science or Knowledge. The one is the method of the pioneer, who points out and blazes the path along which the plodding scientist and engineer slowly but surely build the safe way. The one class may be called the pathfinders, and the other the road builders. Both are necessary.

The remainder of the time allotted, I shall devote to a brief consideration of the methods and tendencies in prevention at the present time, and perhaps I cannot do better than to take the work of the Anti-Tuberculosis League as typical of certain of these tendencies and methods. What then are the chief or cardinal features of the means employed for the prevention of tuberculosis? The first and most prominent is the open air life and the "sweetness and light" that naturally belongs to such life. The people are urged to live, move and have their being in the open—to work, to rest, to eat, and to sleep in the open; and the bacteriologists now tell us that among the best of all destroyers of the tubercule bacillus are sun and air.

The next conspicuous feature in this tuberculosis prevention work is cleanliness. The persons affected with tuberculosis are taught and urged to be clean in all their habits and surroundings. The sputum and discharge must be disposed of in such manner as will not endanger others nor re-infect themselves. And those who are not already infected are taught and urged to protect themselves from contamination, by cleanliness. The wearing apparel of the infected, the bedding, the towels, napkins, and handkerchiefs must be cleansed constantly and thoroughly, even "purified by fire" if necessary to destroy the germs of infection. And the room or apartments occupied by the infected—what of them? We fumigate and scour and scrub, and repaper, and whitewash, and let in the air and sunshine; and still we are not satisfied. More and more the tendency is to abandon the infected house and take the open. We are losing our fear and dread of the weather in proportion as we learn the advantages of the open air and sunshine. Man's organism is primarily and actually a natural growth and all attempts to cut it off from nature have been failures, and have been followed by disease.

It has been said that "cleanliness is next to Godliness," and we are finding out that it is very near to naturalness. It is exceeding difficult to keep clean except in intimate con-

tact with nature, sun and air and water.

The third and last, but not *least* striking fact in the work against tuberculosis is the attention that is given to the alimentary tract, and to dietation, food and feeding. It is a question not yet settled as to how the tubercule baccillus enters the human organism; whether by way of the air passage or by way of the food passage. The weight of evidence seems just now to be tending to show that it enters by way of the food tract. However this may be, it is a fact that the conditions of the mouth, stomach and intestines, and the character and quality of the foods, and the methods of eating, play a vast part both in the prevention and cure of tuberculosis.

We are acquainted with what has been said and done in regard to the milk and meat supplies. Even if we do not accept the theory that the bovine tubercle produces tuberculosis in man, we still must recognize how excellent are both milk and meat as culture media for the perpetuation and transmission of the human bacillus, and how easily they may become infested by these germs. Indeed it is just in this line that the greatest activity is now being manifested. The scene of investigation has shifted from the lungs and air passages to the mouth and alimentary tract, and the evidence is accumulating which points to this tract as the point of entry rather than the lungs or the air tract. The claim is now made that the tubercule baccilli have been found in the blood before they have been found in the lungs. There is good reason for thinking that they are eliminated from the blood by and through the lungs and other emunctories, and that it is this eliminating process which first causes trouble in these organs. The bacilli found in the urine and sputa are those thrown out by the kidneys and lungs. It seems more than possible that they will yet be found first in the alimentary tract. If this turns out to be so it points to the alimentary tract and the food supply as the important field for preventive work, as it has already become the important field for curative treatment.

It is now admitted generally that the cure of tuberculosis, unless the digestive tract can be kept in good working order, is practically impossible, and that to make headway against the disease the food must be of the best, suitable for the thorough nourishment of the body, and not poison producers. Recent investigations show that the mouth is often the seat of tuberculosis, as well as many other microbes, even when there is no evidence of general infection.

We now come to the consideration of a factor or factors in this problem that have not been as yet adequately considered, so far as I know. I mean the part played by the digestive juices and the lining membrane of the digestive tract in relation to the pathogenic germs. The experiments of Pawlow show that the digestive fluids are capable of being increased sevenfold in quantity and qualty under certain circumstances. We know that the gastric juice, when of good quality and adequate in quantity, can digest and disintegrate the flesh of animals, the albumen of eggs , the fibrin of milk, the gluten of grains,

the cells of vegetables etc. What is the probable effect of such an agency on these pathogenic micro-organisms such as the tubercle bacilli? If the stomach of a snake can digest a live frog, what can the stomach of man do to a live bacillus? If the ordinary gastric juice is capable of digesting the various articles mentioned above, what can it do when increased in potency by sevenfold, as proposed by Pawlow? If such a fluid does not destroy such micro-organisms, we are forced to wonder why it does not. It is morally certain, if not actually demonstrable, that the digestive juices of a healthy person does destroy the pathogenic germs in the stomach.

The lining membrane of the alimentary canal is very closely allied to the skin. When the skin is sound and intact, all kinds of pathogenic bacteria may be brought into contact with it and there will be no resulting infection. Why is it not reasonable to believe that the same is true of the inner skin or lining? Indeed is any other supposition reasonable? I believe that as it has been demonstrated that so long as the skin of the hand is intact and whole, one can handle bacteria of all kinds with impunity, so it will yet be found to be a fact that as long as the linings of the food and air passages are intact, we may breathe and swallow germs with impunity.

There is yet another factor that is playing an ever increasing role in the struggle against disease. I refer to the immunity that is known to be the happy possession of the physiologically sound, especially that which is due to the white corpuscles of the blood, and to what Metchnikoff calls the noble elements of the secretions, blood serum and to the cells of the tissues.

The thing that grows more apparent with each step in this progress is that it is the weakened tissues—the weakened cells, and the weakened secretions—that constitute the real menace, and not the socalled pathogenic germs. A weak organism is always and everywhere in danger, owing to the Darwinian law which says the unfit shall not survive. And it is increasingly evident that the weak tissues, cells and secretions, are the direct result of defective alimentation; mainly due to fermentative and putrefactive changes in the food, especially in the large intestine. It would seem that the only sure prevention as well as remedy lies in the direction of those things that make for cleanliness, internal and external, better food and air and water, but particularly to the need of a dietary and a method of eating which will make certain that the food taken will be digested by the digestive fluids, and absorbed, and not left to be fermented and rotted by the intestinal flora. The work of such men as Pawlow and Metchinkoff and Fletcher has thrown great light on this way, and already we are making splendid progress both in cure and in prevention by dietation, by chewing and tasting of food and also by limiting quantity, and selecting *quality*.

At the recent meeting of the Tri-State Medical Association, I was greatly interested in the report of "500 cases of operation for appendicitis, with only two deaths." The happy surgeon who did those operations asserted, and valiantly defended his belief in the old doctrine of *vis natural medicatrix*. In our progress in prevention, it is plain to be seen

that faith in nature, not only to heal, but also to prevent disease, is growing and waxing strong. As we have shown above, we are looking to the light of the sun, the freshness of the air, the purity of water, and the sufficiency of food, a clean and wholesome life, for both prevention and cure of tuberculosis. The time is not far off when the same will be true of other diseases.

The anti-toxines and the serums have had some vogue, and at first were hailed as a promise and potency from which much could be expected. But already they are on the wane as compared to the vast hope there is now springing up in the possibilities of prevention, by and through these natural and rational methods. It is one thing, and well enough in its way, to find antidotes for poisons, but it is a far finer thing to discover how we can avoid being poisoned from either external or internal sources. An automatic and ever-present natural physiological immunity is much to be preferred to any anti-toxin, antidote, germicide, or curative agent. Preventive medicine is now concerned chiefly with house-cleaning and neighborhood cleaning, with putting the body in its natural order, and in making clean and pure the environment in which it lives. The fight against the mosquito and the house fly, the tubercle bacillus, and the typhoid germ, is resolving into efforts to make the surroundings clean and orderly, and to keep the water, and air, and food-supplies pure and unpolluted. And all our physical culture, gymnastics, athletics, dietetics, Fletcherism, mental science and the rest are but efforts to build and cleanse and make strong and enduring the natural powers and immunities of the organism. In a word to study and work for health and sanity, sweetness, cleanliness, and light, have become the aim and method of many medical men and others who are seeking "To enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the people in prevention and cure of disease, and in prolonging and adding comfort to life."

Fillmore Moore,
Aiken, S. C.

PELLAGRA—WITH REPORT OF SIX CASES.*

G. A. Neuffer, M. D., Abbeville, S. C.

Pellagra is a nutritional disturbance said to be due to the use of altered or diseased maize. It is not contagious or communicable. Its immediate cause is claimed by some authorities to be a toxine formed by decomposing or fermented maize and called Pellagrozein, but it is dependent upon bad hygienic conditions, lack of proper food and exposure to the sun. It effects the cerebro-spinal, digestive and cutaneous systems. It occurs most frequently in the poorest classes in women between the age of

*Read before the Abbeville County Medical Society.

thirty and fifty, and especially common in certain districts in Italy, though it is also met with elsewhere.

It has only recently been observed in this country and Dr. J. W. Babcock of Columbia, S. C., was the first to make a full report on the disease in the United States. Dr. G. H. Searcy has reported 88 cases of acute Pellagra in the colored Insane Asylum at Mt. Vernon, Ala., 64 of the patients dying. The maize eaten at this institution was found to be decomposed and unfit for food. Dr. R. H. Bellamy of Wilmington, N. C., read a most interesting and instructive paper on Pellagra at June 1908 meeting of the American Medical Association.

The first clear manifestation of the disease is the pellagral erythema, which almost inavariably appears in the spring, and attacks the exposed surfaces of the body, chiefly the backs of the hands, and the outer surface of the forearms.

With these cutaneous manifestations there are digestive troubles, ptyalism, dyspepsia and diarrhoea which may be of dysenteric nature. Severe pain and feeling of pressure or weight over the region of the stomach is common.

After lasting for a few months, improvement occurs in the milder cases, and during the winter season the patient is apparently well, only to be attacked again in the spring. In the more severe and chronic forms there are pronounced nervous symptoms, headache, backache, spasms and finally paraylsis and mental disturbance. The mental manifestations which are rarely met with until the third or fourth attack are melancholia or suicidal mania.

The patient presents marked and a most troublesome symptom, the mucous surface from the mouth to the anus is affected, the tongue becomes red and denuded of epithelium, and the gums swollen and sore. The genitalia are also affected, the vagina and cervix are red, inflamed, itch and have considerable discharge. There is usually some elevation of temperature.

Case I. Mrs. McC., aged 22, married, no children. I treated her from Aug. 6, 1906 to Oct. 12, 1906. When first seen, I diagnosed stomatitis, accompanied by a peculiar eruption on the back of the hands, which I did not undertake to name. Treatment for stomatitis did no good. Her symptoms briefly stated were as follows: Fever ranging from 100 to 102 F., a redness and swelling of the skin over the back of both hands and forearms, with intense itching, sore mouth, red slick tongue, gums swollen, free flow of saliva, no appetite, vagina and cervix uteri presenting same conditions as mouth, discharge and itching intense, pain over epigastrium, rapid emaciation, obstinate diarrhoea, and for two weeks before her death which occurred on Oct. 12, 1906, she suffered with acute mania, requiring hypodermics of morphine and atropine to control her. This patient was seen by several of my brother physicians, but none of us made a diagnosis, nor had we the remotest idea of the correct one. I do not deem it necessary to give you in detail the treatment of this case. Suffice it to say, that she had every kind of treatment, both internal and external, that three physicians could think of, but all without the slightest benefit, and death ensued as stated above.

Case II. Mary Smith, negress, age

27, married, no children. I treated this case from April 13, 1907 to June 12, 1907. She presented identically the same conditions as Case No. 1, and had exactly the same train of symptoms. Dr. Gambrell who saw her with me, as well as myself, was particularly struck with the marked similarity of the two cases. She re ceived about the same treatment as Case No. 1, and grew steadily and rapidly worse. The family becoming dissatisfied, on June 12, 1907, I was dismissed and Dr. J. C. Hill took charge of her. She lived some two or three weeks after this and Dr. Hill did not diagnose. Dr. Hill also told me that for sometime before her death she had acute mania.

Case III. Mrs. L., age 50, married, 6 children. About the first of April, 1908, she sent to me for some medicine for sore mouth, after sending back several times, always with the same message that the medicine had done her no good, I visited her on April 10, 1908, found her weak, emaciated and with tongue slick and red, buccal surface red and inflamed, intense nausea, pain over epigastrium, intractable diarrhoea, temperature running 100 to 102 Farenheit, rectum, vulva, and vagina red and inflamed, and great itching. In this case there was no typical eruption on back of hands, but some discoloration. Treatment did no good, and the patient died April 23, 1908.

Case IV. Mrs. C., age 40, married 4 children. For several years patient has suffered with articular rheumatism. During the winter of 1907, she had an eruption on back of hands which she called "chapped hands." I saw her May 3, 1908. She complained or dysenterey and sore mouth. I treated her several days without any improvement when my attention was called to an eruption on the back of her hands, the eruption was the peculiar one that I had seen in my Cases Nos. 1 and 2, and I at once saw that I had Pellagra to deal with. This patient presented the same train of symptoms as Cases 1 and 2. Peculiar cruption on hands, intractable diarrhoea, sore and inflamed tongue, mouth, vagina and rectum, temperature 100 to 102, pain over epigastrium, nausea. Dr. C. F. Williams of Columbia came up and saw the case with Dr. Gambrell and myself. He agreed in a diagnosis of Pellagra, and advised symptomatic treatment, and gave his opinion that the patient would not live 60 days. Her symptoms did not yield, and her condition was growing worse steadily. At one of my visits one of her daughters said to me, "Dr. you gave Ma a mouth wash when she had sore mouth, and it did her all the good," after thinking awhile, I recalled the fact that I had used Hydrogen Dioxide as a mouth wash with her mother. Nothing I had done benefited my patient and I was willing to try any suggestions, so I sent over some Hydrogen Dioxide and the patient began using it as a mouth wash. The sore mouth got better at once, and this suggested the internal use of it. I then gave 15 drops Hydrogen Dioxide in water, every three hours. She began to improve at once, and by June 1st all symptoms of Pellagra had disappeared. This patient is still living, and under observation. I keep her on a tonic of Iron, Quinine and Strychnine, cut out all products of Indian Corn in her food, and have her to eat generously of meat, and am giving Soamin twice a week to prevent a return

of the trouble. She is now doing her own house work.

Feburary 15, 1909 this patient had a severe attack of tonsilitis, after which she was very much run down. March 31, 1909 I was called to see her, the backs of both hands were red, and there was some itching, her tongue was slick and red and the buccal surface red, she was in considerable distress of mind, believing that the disease was returning. I put her on Hydrogen Dixoide, 15 drops every three hours, and Atoxyle 1-3 gr. tid. in a few days these symptoms disappeared, and she is now in her usual health.

I wish to explain that during the interval between treating Cases Nos. 1 and II, and Cases III and IV, I read Dr. Babcock's report on Pellagra and at once recognized the fact that my cases were Pellagra, and, of course, I had no trouble in diagnosing the other cases.

I have under treatment two other cases, making six in all.

Case V. White woman, married, three children, age 40. This case is of the better class; and presenting the same clinical picture already described. I will not detail them again. She is taking Atoxyl, and I am watching her closely for any return of the trouble this spring.

*Case VI.*L Negro man. Farm hand, aged 50, is the only male I have had under my care. So far he has been an office patient. I am giving him Fowler's solution. He now has the eruption on back of hands, and some gastro-intestinal trouble.

I am using Hydrogen Dioxide in my cases, and watching results closely.

"PELLAGRA."

C. M. Walker, M. D., Westminister, S. C.

Since I was asked to prepare a paper on pellagra, we have had quite a number of meetings in different places at which this subject was discussed in detail by the ablest men in our profession, and little has been left unsaid so far as our present knowledge of this disease is understood.

The recent meeting in Columbia was national in scope, in fact papers by men of world-wide fame were read and discussed. Since then a meeting has been held in the city of New Orleans, at which this disease was a popular subject for discussion. The newspapers and medical journals have also contributed their share of remarks on a subject of which we at the present know very little.

In view of these facts I will confine myself to some observations as they occurred to me.

My reason for bringing this subject of pellagra before this meeting is not to propound a new theory concerning its cause, but to urge upon profession the necessity of its most earnest consideration concerning this grave and widespread disease.

Two or three years ago it was practically unknown in this country. Now

every Southern State has hundreds of cases of this dread disease. While the North West is also furnishing her quota, and bids fair to rival the South in her headlong rush as a pellagra centre. Within the last two years pellagra has appeared as if by magic. If this condition continues for a short time we will rival Italy as a pellagrous country.

I am not an alarmist, but it is the constantly increasing number of the cases that comes into ones practice and makes us apprehensive, and causes us to wonder what each succeeding spring will bring forth in the way of a new crop of pellagra patients.

It is not the purpose of this paper to go into the symptoms of this disease, as we are all familiar with them, but I will say here that it has not been so very long since I had cases that were treated for eczema without avail, and when they developed nervous symptoms and became insane, I did not know that I had been treating pellagra. It was only after Dr. Babcock's celebrated paper was laid before the scientific world, that I knew such a disease existed in this country. The first authentic accounts we have of it, are that it occurred in Italy about the years 1735 to 1750, ravaged that country and soon passed to France and Spain.

In Italy it is considered one of the chief plagues of the country. Until the recent outbreak in the United States, pellagra had not been recognized in America, except in Mexico, Brazil and Argentine Republic. In fact Sambon in 1905 referred to this country as the only place where maize was grown extensively that did not suffer from pellagra.

In Italy it developed to such an extent that the government took steps to prevent its spread. Later Lombroso spent his life in studying its details, but today we are not much nearer a solution of the problem than we were two hundred years ago.

Sambon stated that in 1881 in Italy 104,067 persons were suffering from pellagra.

In 1903 an examination of the mortality tables showed plainly that it was decreasing, but increasing. And that out of every one hundred thousand cases at least three thousand were in the lunatic asylum of the kingdom.

The lunatic asylums of the Southern States now show a considerable per cent of pellagrins, and to the superintendents of these institutions are due largely the investigations that have followed the present epidemic of pellagra.

Sambon also states that "the countries that have had epidemics of pellagra have been limited to low lying districts or to other localities with a high water table."

From the concensus of opinions of the most prominent observers up to this time, including such authorities as Lombroso, Sandwith, and Sambon, is that it is caused from eating damaged maize or Indian Corn. There are other theories as to its causes, advocated by prominent men in the profession, but the most popular one to-day is the maize theory, and in all probability this will prove to be the correct one.

The study of pellagra is most confusing.

Accepting the maize theory as being the correct one,we find that in all countries that have epidemics of pellagra, corn was used as a staple

diet long before this disease made its appearance.

Corn was introduced and used as a diet in Italy two hundred years before pellagra was recognized. If it did not exist before that time, then it is difficult to explain why it did not manifest itself sooner after the introduction of this cereal.

Could the cause have been in the curing and harvesting of the corn? This is hardly probable. No doubt the peasants in Italy live in much the same manner today as they did when pellagra first appeared. Heretofore a very important fact had been pointed out, that it did not attack indiscriminately all those who lived chiefly on maize, only the field laborer being affected.

The epidemic we are now contending with, differs from the Italian in the fact that it is attacking all classes, though the poorly nourished seems to suffer most.

Another difference we find is the age incidency, Italian statistics show a majority of cases occur between the ages of twenty and fifty years.

I believe in this country more adults are affected also, but physicians in different parts of the country report children from two to five years old as having been affected.

The Italian children as a rule did not have it. This caused Sambon to point out the fact that if it was damaged corn that caused it, children would undoubtedly suffer most, as is the case in ergotism. The North American Indian raised corn from time immemorial. The Southern farmer has always used it as an article of diet, in fact the poorer classes have lived almost entirely upon it, until today the United States is the greatest corn producing country in the world, yet we have not recognized pellagra until recently.

Perhaps the secret lies in the fact that the Southern farmer has until the last few years raised his corn at home, our mode of living has not changed, our methods of curing and harvesting corn has not materialy changed.

The Southern States raise the finest quality of corn in the world. In this land of perennial sunshine, with its length of season, the corn has time to fully mature before it is harvested, and is usually allowed to become thoroughly dry before it is stored. This is not the case in the great corn producing states of the North West. There the seasons are short, and the corn has to be harvested before it is fully matured and thoroughly dried on account of early frost.

Corn of this character, when bulked and afterwards shipped South becomes musty and often moulds, and as the farmers say is "black hearted."

Is it this damaged corn that is causing this epidemic of pellagra?

I would not do the Western growers an injustice, but I do know that large quantities of damaged corn are annually shipped to this country, and believe that as a protection to our people it should come more fully under the pure food law, and that it should receive the attention of the federal authorities.

The farmers long ago realized the fact that this Western corn would produce "blind staggers" in horses. That being the case is it any wonder that this same corn would produce something as harmful in man? Pellagra has no doubt been unrecognized in the South for several years, and perhaps commenced about the time

we decreased our corn acreage and increased that of cotton, thereby necessitating the consumption of more Western corn.

If this is not the case then the corn in this country must have undergone a decided change is some respects within the last decade.

In summing up the facts concerning the geographical distribution of pellagra, we find that it has only appeared in those countries where corn is raised and used largely as a diet, but it is a curious fact that it is not found in all countries where corn is grown and used as food. For instance, Ireland has no pellagra, yet the poorer classes live largely on corn products, but perhaps her inning like our own, is just ahead.

The U. S., have been pointed out by European authorities as a country where vast quantities of maize was grown, and as being free from pellagra. Now they can say it no longer, and can only point to Ireland as the only exception.

I believe the time is not far distant when we will more fully understand this disease, and I believe it is reserved for the creative genius and master mind of the American profession to solve a problem that has puzzled the world for three hundred years.

C. M. Walker, M. D.,
Westminster, S. C.
November 12, 1909.

THE SPIRIT AND PHILOSPHY OF MEDICAL ETHICS.*

L. B. Bates, M. D., St. Matthews, S. C.

Our code of medical ethics is that system of rules formulated by the American Medical Association, and adopted by the various state and county associations for the express purpose of regulating the conduct of physicians toward their patients and patrons; toward their brother physicians; and toward the profession and the public generally. It is a code of rules well founded in truth, justice and righteousness, and has stood the test of experience and the ravages of time. It is built on the Rock of Ages, on its essential basic principle—"Thou shalt do unto others as thou wouldst have them do unto you"—and its whole spirit and philosophy may be comprehensively condensed into this: "Acting as one real gentleman should toward another in every respect." This teaching is in direct antagonism to the natural instinctive selfishness of man, which induces him to reach out in every direction, seize and appropriate everything in sight for his own aggrandizement, without due regard for the ultimate reactionary effects on his own character, or for the rights of others, on which he tramples in his selfish career. No argument is needed to support this view. It is self evident to the merest tyro in the observation of humanity.

Now, to carry out the true spirit of our code of ethics one must "love his" medical brother—"his neighbor as himself." Love, here as everywhere else in the universe, is abso-

*Read before Orangeburg County Medical Society.

lutely essential for the fulfilling of these rules at it is to that of all law. Love worketh no evil to his fellow physician; but selfishness and greed, and avarice and vanity, work all manner of evil. To be a true ethical physician, absolutely demands the possession and the constant exercise of a true catholic spirit. Like Abou Ben Adhem's, our name must ever be written by the recording angel "as one who loves his fellowman." Such a one, even though he has never read one paragraph of our code, we sincerely believe, would instinctively be essentially ethical in his bearing and deportment, not only in consultations, but everywhere and at all times. On the other hand, the one without this essential spirit would perforce be unfair and self-seeking.

Ethics is not a mere veneer of manners or morals, of suavity or polish or mere mental culture: It strikes deeper down into the very foundation of our being, touches the most sacred innermost recesses of our souls, and demands for its ideal, its altruistic observance, all the elements of a true and noble character—a real gentleman, not the conventional one, but the one who adores the God who created him, and loves and helps the brotherman who toils and associates with him.

There should be in the eternal fitness of things, and there is in reality, a demand for as high and exalted a code of ethics for the healers of the body as for the ministers of the soul. The priest "passed by on the other side"; the Levite came and looked on him and passed by on the other side also; but the poor, humble, despised, Samaritan had compassion on him, went to him, bound up the severe wounds of the man of Jerusalem (with whom his race had no dealings) and dressed them, and took him to an inn and provided for his wants. Which one of these three was neighbor to him who fell among thorns? asked the Master, and the thieves? asked the Master, and the answer was, "he that showd mercy on him." Here we have the true spirit of our noble code illustrated by this good Samaritan.

Surmounting all barriers of racial and social caste, the true physician and surgeon goes unhesitatingly to minister to human suffering, his only criterion being the patient's need of his skill. "Go and do thou likewise", and do not pass your professional brethren by "on the other side" who have fallen by the wayside, wounded and bruised in the strenuous conflicts of active practice, but go immediately to their assistance, bind up their wounds and send them on their journey rejoicing. Many, perhaps, who believe with David Harum, "do unto the other fellow what he would do unto you and do it first", will be tempted to sneer at our lofty conception of our ethics, and will say the ideal is extreme, impracticable, utopian, unattainable, so long as human theory of the struggle for su- is now; and will seek to justify their unethical conduct under the Darwinian throng of the struggle for supremacy and "the survival of the fittest." Should we banish religion, destroy learning, and smother conscience and revert to savagery to eliminate the weak and incompetent, to strengthen and build the human race? The survival under this plan of strife is often the survival of the unfittest ones in our professional ranks to supply the world's great agonizing human cry for love, for

compassion, and help and relief from mental and physical suffering—a soul piercing cry for "a friend in need" and "a friend in deed" with a heart full of love and faith and hope and joy and peace, as can, in human extremity, bow at the bedside and point a dying patient's faith to that "Friend that sticketh closer than a brother"—the Great Physician, but this, you will say, is the very apotheosis of the members of the medical profession consecrating them! Yes, this is just my conception of the true, beautiful and glorious ethical ideal and standard the physician should grasp, should foster in his daily life, and should strive to realize in his professional career. He who does not earnestly strive to measure up to the demands of this high ideal professional honor and professional etiquette, "burns strange fire" in unconsecrated censers before the sacrificial altars of our grand and noble profession, second in place of honor only to the glorious gospel of Christ. Conduct is the true mission of man. Conduct is but the outward expression translated into action of what is stored up in that marvelous dynamo and divine mystery, the human heart! How eminently appropriate, then to the physician, as well as to mankind, is the divine injunction, "keep thy heart with all diligence," Why? "for out of it are the issues of life," Why again? "for out of the abundance of the heart the mouth speaketh." Why again? "As a man thinketh so is he," says Solomon the wisest.

Emotion, thought, speech, action, summarize man and woman potentially. How important then that the foundation head of help—the source of physical intellectual and spiritual existence be pure, and be kept pure, uncontaminated by the polluting currents of selfishness, of avarice, of sensuality in the fiery warfare of this life when the votary of medicine is ofttimes made to feel "how divine a thing it is to suffer and be strong." But then his is the consolation of travelling in the painful footprints of the grand old pioneers who here toiled and suffered and achieved, surmounting all obstacles. Weary with abundant labors, and furrowed by care and silvered by age, these noble men of the past, by their experiences and scientific research have enriched our noble profession and elevated it to a sublime standard of usefulness and efficiency, and made the whole world their benefactors. These are they who out of the abundance of their mature experiences, and suffering and love for their brethren, have bequeathed to us this noble national code of ethics. Our Medical Magna Charter of rights and privileges, worthy in every respect of our profound admiration and adapted for our wisest guidance.

The medical profession, from its innate peculiarities, requires a specific code of ethics to govern its members. Medicine is not an exact science, and the administration of drugs, and the use of other medical agents, from the imperfections of our knowledge necessarily cannot give exact results, and the physician himself cannot always judge of the true and definite results of his administrations.

Ever so many of our "woes unnumbered" spring from this faithful cause, and the obstinate refusal of the public, to recognize this fact, and to judge us aright, and our work; as well as to learn as they should, how to discriminate between the preten-

sions of blatant Quack, an oily Charlatan, or a Sanctimonious Christian, or Mental Scientist, and all the vile brood of the witches broth of isms of the day, and the work of a truly scientific physician.

In no other profession are extrinsic means so lavishly offered for competition as in the practice of medicine; and the opportunity so great for ungenerous, or unscruplous advantage. There is no wise dignified judge "to call down" the erring physician as he does the offending attorney. The only judge is his own conscience which makes his obligations and responsibilities to the public all the greater for the results of his ignorance, carelessness or neglect.

Under such circumstances, it is not to be wondered at that physicians are peculiarly and justly sensitive about their professional status with the public, and especially concerning their relations with rival practitioners, therefore, to steer his course aright, the physician should possess not only an acute mind, but also high moral character, personal magnetism, and last but not least, an infinite tact. He should be as wise as a serpent, as harmless as a dove. Even then the quick sands are ready to engulf him.

The Romans inscribed on gateposts "cave canem." The physician should groove deeper on the tablets of his heart "beware of the designing woman!" Now the rules of conduct adapted to the peculiarities of medicine as a profession constitute medical ethics. These rules have a direct and profound moral weight. Medical etiquette, on the other hand, consists of the forms to be observed among physicians. These are conventional, have not the binding force of ethical rules, nevertheless, they should be observed to guard against embarrassment and confusion.

Suffer me to quote from our code the following pertinent extract: "every individual on entering the profession, as he becomes thereby entitled to all of it's privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standard, and to extend the bounds of its usefulness." He should, therefore, observe strictly such laws as are instituted for the government of its members; should avoid all contumelious and sarcastic remarks relative to the faculty as a body; and while by unwearied diligence he ressorts to every honorable means of enriching the science, he should entertain a due respect for his seniors who have by their labors brought it to the elevated condition in which he finds it. "There is no profession, from the members of which greater purity of character, and a higher standard of moral excellence are required than the medical; and to attain such eminence is a duty every physician owes alike to his profession and to his patients."

The obligation to obey the code, and the reasons for it are very clearly stated. The adoption, and the observance of our code by State and County Socities, is made an absolute requirement for membership in our national organization. At the convention, in 1847, which organized the American Medical Association, our present code was adopted unanimously, and has been our supreme law ever since. It is based on the British code, written by a typical old English family physician expressly for his own son, Dr.

Percival. Our code comes to us not only with the binding authority of our supreme organization; but also with the added interest of being a loving father's legacy to his son. We older physicians should always be alert to show our interest in the welfare of our youthful brothers as well as our zeal for the honor and purity of our profession, by reproducing and multiplying ad infinitum good old Dr. Percival's fatherly act by calling their attention to our code, and urging on them its strict observance, as the inspiration and guide of their professional career. 'Tis a sure chart to enable us to steer safely between the Charybdis of Commercialism and the Scylla of Vanity. But right here, as at Ai "Sin lieth at our door" which has prevented greater triumphs of our art. This sin is omission consists of three essential elements. The first of these is ignorance of our code; the second, failure to practice its precepts; third, failure to persistently try to diffuse a more intimate and precise knowledge of its principles among ourselves, and also among our patrons and the public generally.

How can we practice what we do not know, or apply what we do not clearly comprehend and do our duty toward our brothers; and how can, the people choose, and treat their family physicians aright, if they are permitted to continue ignorant of the sweet ethical ideals which should govern their choice and regulate their conduct? Here we have been "exacting bricks without the promise of straw." How many of us men possess a copy of our code, (all of you who do please hold up your hands.) How many of us who have read it have so clear a perception of its principles, as to readily apply them to all the complicated exegencies of actual practice for which they are designated? Medical ethics should be one of the specialties of specialties at college. If this were done, then much grief, mortification, loss of time, prestige and money might be saved by the young men sent out by the Medical Colleges well equipped, but profoundly and woefully ignorant of the common sense principles involved in the knowledge of "how to conduct a practice." The novice is turned out into "the wide, wide world" on his own resources to learn the way to success or failure. He may be competent to ligate the femoral artery and yet not know he should not hitch his horse to a barbed wire fence, or not to give him a peck of corn at a feed—when he is tired, hot, and thirsty. This it not only cruel to the Neophyte but is also lamentable and living reproach to the pride, intelligence and progressiveness of our great profession. We need to imitate our legal friends, and to study more assiduously our own code of procedure; or perhaps it would be better to adopt the good old Methodist rule, and require our code to be read out in our County Medical Society at least once a year and the meeting in January would be a good time. It would enable us to start the New Year right. It will not be our purpose to renew or analyze our code. It would weary your patience and we are incompetent for the task.

I had hoped this would have been ably presented by our lamented brother, whose eloquent lips have been sealed by death's cold kiss, and whose facile pen has fallen from his deft fingers forever. It is so hard

to realize that our brother Gus Hydrick, the much loved, the genial friend, the wise counsellor, the brilliant physician and surgeon has passed to his eternal reward. So recently he was here to cheer us with his presence, and his eloquent voice was heard for the last time, in our counsels. I feel like I have received my commission from him. He requested the president to appoint me to read a paper jointly with him on Medical Ethics. I prepared the major part on the spirit, hoping that his paper would cover the practical working of our code. I hope my paper will serve its main purpose as an introduction to a general discussion of the practical workings of our code, participated in freely by all of our members.

UNCINARIASIS.

William Weston, M. D., Columbia, S. C.

The condition which has existed for so long in the South under various names, such as "Dirt-Eater's Anaemia," "Clay-Easter's Anaemia," is realized now to be due to Uncinaria Americana, a term first applied by Dr. Stiles, of the United States Public Health and Marine Hospital Service, in contradistinction to the Old World Uncinaria Duodenale. Since Dr. Stiles has demonstrated the difference between the two parasites, his views have been adopted by observers and writers upon the subject.

It is to Dr. Ashford, of the United States Army Medical Corps, a pupil of Dr. Stiles, who first demonstrated that the Porto Rico Anaemia was due to this parasite, and calling the attention of the American physicians to the subject and its great prevalence. Dr. Stiles having asserted for some time that this disease was prevalent throughout the South, has observations have since been confirmed by many physicians throughout the South. He furthermore asserted that the Anaemia so common among the rural white population and cotton mill employees in the South was due to this disease. His assertion has since been amply verified.

Dr. Stiles defines the disease as a Zoo-parasitic disease, found especially in the tropical and sub-tropical sand areas and caused by hook worms (the Uncinaria Americana) which inhabit the small intestines. This disease, however, is by no means confined to the sand areas, as it is quite prevalent in clay swampy soil, where it is usually mistaken for chronic malaria. The disease is prevalent in the Southern States, and probably also in Southern Illinois, Southern Indiana, Missouri, Porto Rico and Cuba.

Symptoms.

The chief symptom, and the one that usually attracts our attention, is anaemia. Usually we find haemic murmurs, difficulty in respiration, emanciation, physical weakness, perverted appetite, pains in the epigastrium and throat, swelling of the abdomen and the lower extremities, and disorders of menstruation.

I wish to call your attention more especially to the fact that when infected before puberty the general development, both mental and physical, is extremely retarded or stopped. The girl that is infected before puberty you will find with breasts that are rudimentary, and hair scanty in the arm-pits and over pubis. Menstruation in such cases is very uncertain, there may be dysmenorrhea or amenorrhea, more often the latter.

In boys, the same lack of hair is apparent, the genital organs are poorly developed, and the general condition poor. In some cases one at twenty-five appears hardly as well developed as a person of 16 or 18 years in normal health. The mental condition of some of these cases is so bad that insanity is often suspected, and the fact that it is not unusual to find uncinariasis in hospitals for the insane throughout the South may throw some light on the cause of the increasing frequency of insanity among the poor of the rural districts. Perhaps some of our alienist friends will later throw some light upon the question as to whether there are not many weak-minded patients confined in asylums where really uncinariasis is the cause of the mental condition. Another important point to be observed is that it is not unusual in cases of uncinariasis to find scars on the hands, arms and legs.

A most important fact to remember in connection with this disease is that when a case is found there are other cases in the immediate family and many in the community.

Means Of Infection.

The worm is taken into the body by drinking infected water, infected fingers being put into the mouth, or more usually through the skin (ground itch). In the four or five hundred cases seen by me each gave a history of having had ground itch. By whatever way these worms enter the body they find their way into the small intestines where they attach themselves to the mucous membrane, sucking the blood and causing minute hemorrhages.

Diagnosis.

Uncinariasis is most often mistaken for malaria, Bright's diease, heart disease, or typhoid fever. Of course a microscopical examination of the faeces will settle the question as to the existence of uncinariasis. It is interesting to note that fequently we meet with cases that will run a typical typhoid temperature for a week or ten days, then suddenly the temperature will drop to normal. I have seen a number of such cases and in most of them I have been able to find the eggs of the uncinaria. Then too, in some cases we have a history of anaemia that may help to arouse our suspicion.

Treatment.

As the eggs do not hatch in the intestine, treatment is simple. At bed-time administer one-half ounce of epsom salts. Early next morning give thirty grains of thymol, and repeat the thymol in two hours; then, in two hours more, give one-half ounce of epsom salts. From the time the first dose of salts is taken until the second dose acts, forbid all food, especially oil or alcoholic preparations. It should be repeated once a week for three weeks. Usually, the day after treatment has begun, give

Prognosis.

Favorable, if the disease is not too far advanced.

PREVENTION.

Treat all cases found and dispose of the faeces.

GENERAL CONSIDERATIONS.

It has been frequently observed that certain portions of the South are notoriously unproductive and that in some portions the people are ignorant and superstitious, utterly lacking in thrift and ambition, and such communities bear the impress, invariably, of the disease under discussion. You have all, no doubt, observed communities in your section where there were no modern farms, no new buildings, or even comfortable dwellings, no factories, few schoolhouses and fewer inmates, and those inmates rarely progressing beyond the primary stages. There are many such communities in this and other Southern States. Starvation has driven many of these people to the cotton mills.

Observe, I beg, the market price of cotton mill stocks where as many as 15 per cent. of the operatives are drawn from such communities. I can assure you it is below par. I know of a mill in South Carolina that has been unsuccessful from its beginning. In spite of the fact that new machinery has been installed, and different grades of cloth have been manufactured from time to time, the stock has never risen to par. Able men had managed the property, therefore, I do not believe the fault lies with the management. This phase of the matter was discussed by some of us and an investigation was instituted among the help and the startling condition was revealed that over 40 per cent. of them were affected with uncinariasis. Many of the cotton mills in the South are thus crippled by inefficient help due to this disease.

As I have said, thousands of farms in the South are being abandoned because of the ill health of their tenants producing starvation and their former tillers are moving to the mills. These people, when they arrive at the mill are often, until cured, a care to the managers or their friends who proceded them. Better hygenic conditions, good houses, and fairly good food, such as the mills offer, is indeed proving a blessing to these people, and each industrial plant that is built in the South should be welcomed, aside from the industrial consideration, because its houses become hospitals for the care of these people.

I would not have you infer that this disease is only found in cotton mill villages and on farms. I doubt if there is a school or student body which does not show at least 10 per cent. uncinariasis. In the instances where we have reliable information as to the actual conditions, 10 per cent. seems most conservative.

You, no doubt, are aware of the debilitating effect of this disease upon children; it hampers development of both body and mind. It would be difficult to even estimate the cost of this disease to the South, but from what we know of it in this State I would say that it costs South Carolina not less than $30,000,000 a year and the money consideration is the smallest part of the cost.

Just at this time when the South seems to so sorely need white labor and is striving so vigorously with the small means at her command to bring in new settlers, may I not ask, without in any way prejudicing the immigration movement, would it not

be just as well to extend to these thousands of helpless people here a helping hand in the way of bringing them the inexpensive treatment necessary to cure them and thereby render them efficient developers of the State's and the South's resources? May I not ask, is it not better that we should? They speak our language, are familiar with our laws and customs and are without the comforts and advantages that their more fortunate brethren have had. I would advise every physician in South Carolina to read the remarkable report of Dr. Ashford on the situation in Porto Rico. I am sure that the report might as well have been written for the South. He says that when they commenced work, there was misery and poverty on every hand; an inconceivably high mortality rate. Lethargy seemed to have grasped the entire population; no new buildings were being erected; the trades were idle; the fields were grown up in weeds; the school-houses were almost empty; the dwellings were squalid and miserable; the population thriftless, idle, and hopeless. These men went systematically to work investigating the cause of such conditions. Thousands of examinations were made and thousands of cases of this disease were discovered and treated. The local physicians were instructed and they went to work. What is the result today in comparison with six years ago? The mortality rate has been reduced by more than one-half; new industries are being started; new and comfortable dwellings being built; modern sewerage and water-works are being constructed all over the island; thousands of acres of land until recently idle are now cultivated; the school-houses are filled to overflowing, and new ones are being built each month. The imports and exports are rapidly increasing; pauperism is disappearing.

I can assure you that what Dr. Ashford's corps has done for Porto Rico we can do here and the results in both cases will be the same.

We can absolutely stamp out and destroy this disease, if we will, thereby restoring to our State thousands of citizens now physically and mentally incapable of assuming the responsibility of citizenship. I am glad to announce to you that this work to a small extent has been begun. I regret to state, however, that it is by so few.

Superintendent of Education, O. B. Martin, is at this time trying to ascertain the extent of this disease among the school children of South Carolina with the object in view of having them treated. I sincerely hope that the newly created office of State Health Officer will do its best to educate the physicians of this State by repeatedly sending them literature on the subject. Should it do so, and thus stamp out the disease in this State, the last legislature in creating this office, will prove to have been the most beneficial one that has ever met in the State's history.

ANTI-TUBERCULOSIS COMMITTEE.

The Anti-Tuberculosis Committee was called to order by the Chairman, Dr. John L. Dawson, of Charleston, on Tuesday afternoon, April 20th, at six o'clock, immediately after the adjournment of the House of Delegates, there being present the following members:

Doctors—

J. L. Dawson, Charleston,
G. A. Neuffer, Abbeville,
Fillmore Moore, Aiken,
Dr. Cox, Chester,
Davis Furman, Greenville,
G. P. Norton, Horry,
T. L. W. Bailey, Laurens,
C. W. Barron, Lexington,
A. M. Brailsford, Marion,
P. G. Ellisor, Newberry,
E. A. Hines, Seneca,
L. C. Schecut, Orangeburg,
W. A. Tripp, Pickens,
R. A. Bratton, York,
Walter Cheyne, Secretary, Sumter.

The Chairman stated that he had received several communications from gentlemen who were unable to be present, which, if the gentlemen desired, he would read to them. These letters are given below:

REPORT FROM COMMITTEE OF EDGEFIELD COUNTY.

We have organized a healthy and growing league here in our county. We have as officers of said league a President; Vice-president; Secretary and Treasurer, with an excellent committee.

We have endeavored as nearly as possible to make this move against the "White Plague," a move of the entire county. We have an executive committeeman from each of the seventeen townships in the county Most of which are enthusiastic ladies, the others physicians. As yet we have not been financially able to employ a nurse or establish a camp, but we hope ere long our county will be along with the most ardent and enthusiastic workers in South Carolina in this great cause.

Respectfully submitted,
Robert A. Marsh.

REPORT FROM COMMITTEE OF SALUDA COUNTY.

I organized an Anti-Tuberculosis League in Saluda County April 17, 1909. Officers: Dr. J. J. Kirksey, President; Mrs. Marion Padget, Vice-president; Miss Cleo Attoway, Secretary and Treasurer, and an executive committee of nine members. Call for meeting was published in county papers and there was a good attendance.

Respectfully submitted,
D. B. Frontis.

REPORT FROM COMMITTEE OF ANDERSON COUNTY.

The Anti-Tuberculosis League was formed in Anderson County on Jan. 16th, 1909 and since that date there have been several public meetings held in different parts of the county and arrangements are on foot to have more.

The work has been entirely educational, but later on, hope to do some practical work.

Respecfully submitted,
Waller H. Nardin.

REPORT OF CHAIRMAN.

Summerville, S. C.
April 20, 1909.

The Chairman of the Anti-Tuberculosis Committee of South Carolina Medical Association begs leave to offer the following report:

A meeting of organization of this committee was held in the Library of the State House in Columbia on Oct., 20th, 1908 of the 39 members. Of this committee 23 were present as follows:

J. L. Dawson, Charleston,
G. A. Neuffer, Abbeville,
Fillmore Moore, Aiken,
Dr. Cox, Chester,
Davis Furman, Greenville,
G. P. Norton, Horry,
T. L. W. Bailey, Laurens,
C. W. Barron, Lexington,
A. M. Brailsford, Marion,
P. G. Ellisor, Newberry,
F. A. Hines, Seneca,
L. C. Schecut, Orangeburg,
W. A. Tripp, Pickens,
R. A. Bratton, York,
Walter Cheyne, Secretary, Sumter.

The counties of Barnwell, Chester, Colleton, Darlington, Dorchester, Fairfield, Georgetown, Greenville, Greenwood, Hampton, Horry, Laurens, Lee, Marlboro, Spartanburg, and Union seding no representatives. A full discussion of the fight against tuberculosis resulted in the following plan of campaign being unanimously adopted:

First: The Association appoint a *standing* committee, consisting of one member from each county society to be known as "The Committee of the South Carolina Association for the Study and Prevention of Tuberculosis."

Second: That each member of said committee be instructed and empowered to organize in his county an Anti-Tuberculosis Association of which he shall be head, and which will consist of a membership of laymen and physicians, to aid and cooperate with him in the fight against tuberculosis. That it shall be the aim and object of these county Associations to instruct the public as to the method of conveyance of tuberculosis, its prevention and cure. That the aid of civic clubs be invoked and that the poorer classes be visited and instructed at their homes when possible.

Third: That this committee meet annually on the day before the meeting of the State Association at such place as the Association has chosen for its meetings and that each member report at this meeting the progress of the work done by his county association.

Fourth: That all reports be tabulated and put into form and be presented to the State Association officially at its annual meeting each year.

According to these resolutions the Committee met today (Tuesday, Apr. 20th, 1909.) There were present 11 members, five members sending in reports in writing with regrets of not being able to be present. The counties not heard from were Bamburg, Barnwell, Beaufort, Cherokee, Chesterfield, Clarendon, Colleton, Darlington, Dorchester, Fairfield, Florence, Georgetown, Greenville, Greenwood, Hampton, Kershau, Lee Marlboro, Richland, Spartanburg, Union, and Williamsburg.

The reports from 16 counties were most gratifying. Great energy and a large amount of work alone could

have achieved the results reported. Abbeville, Sumter, York, Aiken, and Charleston have completed organized practical working leagues. They have raised funds by applying to the State Legislature for an appropriation in Sumter county. In Aiken individual subscriptions have contributed a sufficient sum for the next year; likewise in Abbeville, York and Charleston. A visiting nurse has been appointed to minister the sick, lectures have been given to the public; the school children have had talks given them on the method of the spread of the disease; the aid of Civic Clubs has been invoked and a response made in every case. Of course, the progress at first must necessarily be slow, but this report is extremely gratifying when we take into consideration that the organized movement against tuberculosis by this committee has been only active for the past five months. As the reports from the various counties have just come in and are still coming in it is impracticable to give them in this report or even to epitomize them, but, they will all be published in the Journal as a part of the minutes of this meeting.

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The Chairman would suggest that this Anti-Tuberculosis Committee be made one of the Standing Committees of the Association and that only active working men be elected from each county.

Respectfully Submitted,

John L. Dawson,

Chairman Anti-Tuberculosis Committee.

Dr. Norton, of Conway:

Our method down there is to begin through advertising. At our medical society which meets every month, we have a short paper, to be published in the daily newspapers, dealing on tuberculosis, that the public should be impressed with. So far we have published one paper. Next month we take up another phase of tuberculosis and deal with that..

In our newspaper work we expect to dwell on the most feasible plan of preventing the spread of tuberculosis, and also how to treat the cases in a house, to keep them from spreading any further.

Dr. Bailey, of Laurens, made a verbal report:

Our organization is not under headway just yet. I have called the attention of the Civic League to this work and I feel that I have their moral, and, to some extent, their financial support. I have distributed some of the papers that were sent to me by the State Board of Health, and also have distributed them in our Laurens County Medical Society, and I have a plan on foot which I understand others have adopted, to appoint sub-committeemen in the different townships to help the organization, which I think will meet the approval of every appointee in our County.

Dr. Barron, of Lexington had been unable to do anything on account of sickness.

Dr. A. M. Brailsford, of Marion:

We have no real organization, but the individual physicians are doing what they can, and we have the support of some of the ladies in our town through the Civic League. I hope soon to have our Society on a better basis, and to do more work.

Dr. Ellisor, of Newberry:

The only work this Anti-Tuberculosis League has done, so far, you

might say, is a campaign of education. We have had several lectures, open to the public, on the subject, and intend also, when the next school session commences, to have a lecture delivered in every school of the County, on the prevention of tuberculosis.

As to the practical work, we haven't done anything, because we are just commencing it, but we hope to do more in the way of house to house visiting and instructing the patients themselves.

We have an opposition that we must remove—in making an early diagnosis of the disease. We must have a bacteriologist to examine the sputum in the early cases, especially in the poorer cases. It is the poorer cases that spread the disease, and unless the State can furnish a bacteriologist to do the work, free of charge, we are going to fall down.

We intend to see that the Anti-Spitting law is enforced. We are just commencing the fight. We intend to wage a campaign against it that will be effective.

The Chairman:

The Doctor is making a very grave error, when he says he wants the sputum examined for a diagnosis. You have waited too long, when the bacilli appear in the sputum. It is a very admirable plan to have the sputum examined microscopically, but don't wait for it. Go ahead and make your examination by the physical reaction of the chest; but don't wait until the bacilli appear in the sputum. You will find the cavity broken down and you cannot cure your patient.

Dr. E. A. Hines, of Seneca:

We have educational work going on through the women's clubs, civic leagues, etc., which I think will crystalize, in a few months, into an anti-tuberculosis league that will give good results.

Dr. Tripp, of Pickens:

I have no report to make.

Dr. L. C. Schecut, of Orangeburg:

Mr. President, I would say the physicians of Orangeburg County have undertaken the work, and are using the facilities at their hands to the best of their ability. One of our doctors delivered a very full lecture on the subject. The ladies of the Civic League have promised, and I have no doubt will help more with the work.

We had a fund started about three years ago, for the erection of a hospital. Up to this time we haven't enough money in hand, but there is a sentiment growing among those who contributed that money, to divert that fund to tuberculosis work, and if we can do that, we will be able to get a nurse there and accomplish something on practical lines.

Dr. Walter Cheyne, Sumter represented Sumter County, the member who should have represented that County being absent:

I make this report for Dr. Parler, he not being able to be present:

We started our demonstration in December.

Dr. Parler requested me to act as Secretary for Sumter County, as well as Secretary of the General Tuberculosis Association,and in calling to our aid some of the citizens and ladies of Sumter, we met a very hearty response, and the Council of the City of Sumter gave the South Carolina Medical Association Committee, who had called to its aid these ladies and

gentlemen, $200.00 for the purpose of having a demonstration, in a small way. That two hundred dollars was expended in the equipment of the "dirty room" and the "clean room," as was seen in Washington. The flash-light was also introduced with death from tuberculosis, timed to appear with every flash. Bulletins that are published by the New York Health Board were also published, and the tuberculosis graphophone records and the slides for the stereopticon were purchased. In addition to this, there was a large amount of literature for the schools, and placards to put up in public places; and we had not only this public demonstration, but Dr. Robert Wilson, of Charleston, came and gave us a talk on tuberculosis, which was much appreciated, and the physicians of the County also took part in the talks that were given that day.

The weather was extremely bad, and the attendance was not as good as we would otherwise have had. But we have distributed these pamplets to the Health Board and the health officer, with the request that he distributed them in the schools, and they have gone all over the County.

That literature is expensive, and it was a very nice thing on the part of the City government of Sumter to give us that money, and I think it was well expended. We have an active Civic League there, and we have a Civic nurse, but this is not under the South Carolina Medical Association Committee. We have started this campaign, and the effect of it is wonderful. The little children are carrying cups to drink out of, and the Health Board has been aroused and is thoroughly co-operating with us.

Dr. Ed. Booth was our Treasurer, and has been working with us, although he has retired from the practice of medicine.

I feel that every cent that was put out will no doubt result in the saving of human lives.

Dr. Cox, of Chester:

Sometime ago our Society appointed a Committee to effect a Tuberculosis organization, and I was made Chairman of this Committee. We secured the services of Dr. Cheyne, who kindly came to Chester and gave us a lecture, and we had a large attendance. At the conclusion of the Doctor's address, the mass-meeting appointed me as President of the Chester County Tuberculosis League, and another gentleman as Secretary, and we started to work, but in the meantime, Dr. Cheyne had requested the President to confirm me as President of this organization, so he called my attention, by letter, to the fact that Dr. Lander had been appointed. Dr. Lander's appointment had been overlooked by the Chester County Society and by the mass-meeting, the reason being, I think, that Dr. Lander has done nothing toward the furtherance of the work. So I decided to wait until the State Medical Association met, and they could make what disposition they saw fit.

So, we haven't really done anything except effect the organization. We are not without a leader. Still, we have had the public meetings and have distributed some literature.

REPORT FROM AIKEN COUNTY.

At a public meeting held in the Baptist church on Jan. 17th, 1909, the league was organized, and called The Aiken County Anti-Tubercular

League.

Dr. T. D. Moore was made president, Dr. T. G. Stone, Vice-president, Dr. Y. A. Melun, Secretary, and Mr. P. Brown, Treasurer.

On March 4th the League employed a nurse, and furnished her with a horse and buggy, to look after the tubercular cases.

Camp was ordered erected for four patients in the pines near the City.

March 30th the league met and decided to call for help from City Council, which was finally obtained.

On Feburary 4th Dr. Moore addressed the league on general preventative measures.

REPORT OF TRAINED NURSE OF AIKEN COUNTY ANTI-TUBERCULOSIS LEAGUE.

Began work on March 4th, 1909. Since then have made 182 calls. At first calls were exclusively to tuberculosis patients, but later included other cases in my visits, as follows: Tubercular cases, 8, Pneumonia, 3, Cancer, 2, General, 10, County Poor House, 31.

I fumigated two houses where inmates had died of tuberculosis. Apr. 1st had a spring cleaning at the Old Folks Home, and on April 15th the County Poor House received similar attention.

I am unable to do much bedside nursing, but go in and suggest what is best for the patients and their families.

REPORT OF YORK COUNTY ANTI-TUBERCULOSIS SOCIETY.

To Dr. Jno. L. Dawson, chairman, Anti-Tuberculoosis League of South Carolina:

I beg leave to report to you that in York County we have an organization by subdivision, that is each city and town has at its head a competent physician, who has united with the municipal authorities, the citizens, teachers, preachers and ladies of their district to form a working body along the lines of prevention.

Dr. Jas. McDowell has charge of Yorkville.

Dr. Roddy Miller has charge of Rock Hill.

Dr. E. W. Pressley has charge of Clover.

Dr. W. M. Love has charge of McConnellsville.

Dr. Joseph H. Saye has charge of Sharon.

Dr. D. L. Hood has charge of Hickory Grove.

Dr. B. N. Miller has charge of Smyrna.

Dr. T. B. Dulin has charge of Bethel.

At a regular meeting of our County Society it decided to make the next meeting one on Tuberculosis, and papers on the subject were promised by the sub-chairmen, Dr. McDowell, Dr. Pressley and Dr. Love, these were read at the meeting and recognized as thoroughly instructive and up-to-date and of great benefit to the Society.

A committee was appointed, by our President Dr. M. J. Walker, to obtain the services of a physician, competent to demonstrate by lectures and stereopticon views before the public for the purpose of arousing interest in this very important matter, to visit our County at an early date. Dr. Walter Cheyne, of Sumter, kindly accepted our invitation and gave his first lecture in Rock Hill at night, the next day in Yorkville at the graded school, be-

fore a large crowd of teachers, the County Commissioners having granted a holiday for that purpose. Ministers, ladies and children, the Doctors of the County, were in evidence. The lecture was very interesting and highly appreciated by all present, so much so that we asked for a return visit from Dr. Cheyne, when he could add to his lecture the views not used at this time. We had made an engagement for Dr. Cheyne to visit Blacksburg and Gaffney, but from an unfortunate delay of train preventing connection and a misunderstanding as to place and time, he missed both places, and I will admit my error in not reading our friend Dr. Anderson's letter more carefully. A complete change was made in time and place of meeting in his letter, to that in our conversation and discussion on this matter while on a visit to my home.

I regret to state that progress is slow. It needs constant agitation to keep it before the people and be effective. The Ladies are absolutely essential, (as in all things that lead to prevention), in the furthering of this work and we hope soon to organize a committee in each district, unite with the ladies in their "City Beautiful" or Civic League, and work for a purpose.

As chairman of my County I wish to commend to you the services of Dr. E. W. Pressley who has charge of Clover and present his name as future chairman of York County. He is the best man we have; thoroughly competent and willing, and has already done more on this work than any one in the County.

Respectfully submitted,
R. Andral Bratton,
Chairman of York County.

REPORT FROM ABBEVILLE COUNTY ANTI-TUBERCULOSIS SOCIETY.

Abbeville, S. C., April 15, 1909.
Dr. John L. Dawson, Chairman,
Anti-Tuberculosis Committee.
Charleston, S. C.

Dear Doctor:

As a member of the above committee for Abbeville County, I beg to submit the following report:

I issued a call for a mass meeting in our Court House, on the night of January 29, 1909. The meeting was well attended, considering that it was one of the most stormy nights of the winter; by actual count there were sixty two persons present, forty-two of these joined our Association that night. The writer called the meeting to order, and briefly stated its object. Brief talks were then made by Drs. C. C. Gambrell, J. B. Britt and F. E. Harrison. Mrs. H. W. Beall of Sumter, S. C., was then introduced, and made a most interesting and instructive address on the work of the Anti-Tuberculosis Association; giving us especially information about the work of the Sumter, S. C., Association of which she is President. A free discussion was then invited, and Mr. C. V. Hammond. and Mr. W. R. Bradley made remarks approving the movement and promising their support.

The Abbeville County Anti-Tuberculosis Association was then organized, with the following officers:

President, Dr. G. A. Neuffer.

First Vice-President, Dr. C. C. Gambrell.

Second Vice-President, Mrs. M. T. Coleman.

Secretary, W. R. Bradley.

Treasurer, Dr. J. C. Hill.

The President was authorized to appoint an Executive Committee, and the President and two Vice-Presidents were appointed a committee to prepare a constitution and By-laws.

Our second meeting was held the first Thursday night in March. At this meeting a constitution and By-laws were adopted. The active work of the Association was placed in the hands of the Executive Committee, and under the direct control of the Chairman. This Committee consists of six women and five men, and Mrs. M. T. Coleman is the Chairman. We also have an Advisory Board consisting of most of the physicians of the County and some prominent laymen.

All applications for membership must be in writing. We chage no admission fee and no dues, believing that we can secure more funds for carrying on the work by depending on voluntary contributions.

Our third meeting was held on the night of April 2, 1909 in the Abbeville Opera House.

After part of the evening's program, consisting of instrumental and vocal music, and recitations had been rendered, the business session was entered upon, and President Neuffer called first for the report of Mrs. M. T. Coleman, Chaiman of the Executive Committee, and Mrs. Coleman read the following report:

Mr. President, Ladies and Gentlemen:

Permit me in making this my first report as Chairman of the Executive Committee of the Abbeville County Anti-Tuberculosis Association, to express my appreciation of the high honor I feel has been conferred upon me by my appointment, and to thank you for allowing me the privilege of selecting my co-workers on this committee.

I believe that you have a strong committee, one heartily in sympathy with the movement, and but for their support and co-operation, perhaps greater feelings of mistrust in my ability would oftener assail me.

Our committee has held one meeting, and considered the subject only in a general way, dividing the discussion into two heads, the Theoretical, or Educational and the Practical.

Educationally we propose to direct our efforts for awhile to a course of public enlightenment, through the medium of the regular meetings by lectures, papers, and open discussion.

Practically, we advise the Association to engage a competent trained nurse, and through her services carry on a defined campaign to alleviate, stamp out and cure.

We shall endeavor to develop the work along the lines found successful by older organizations, and will later, and at the proper time complete our plan as follows:

Locate centers of infection by compulsory reporting and registration of cases of tuberculosis. Free examination of sputum.

Power of removal of those advanced cases where through negligence or inadequate provision, the infection of others is threatened.

Adequate provision for care of these advanced cases.

Adequate provision for care and treatment of incipient cases.

Tuberculosis camp for care and instruction.

Thorough disinfection of houses. Compulsory reporting of removal.

Provision and enforcement of ordinances as to spitting.

Provision of diets, milk and eggs

for destitute cases.

Our committee has met with considerable encouragement. We have canvassed practically the whole town, and have secured the names of 556 members.

That consumption is communicable, but preventable and curable we firmly believe, and for the aim that means right living we cheerfully pledge our work.

Respectfully submitted,
Hannah Hemphill Coleman,
Chairman.

Dr. Neuffer then made an interesting and instructive talk about the great movement of which our society is to form a part.

President Neuffer then announced open discussion of this question, and Senator Wm. M. Graydon discussed the question in a pleasant and profitable way.

Mr. John R. Blake was then introduced by the President and in a forcible manner, spoke of the economical and financial side of this great question.

An effort was made to canvass the audience for annual subscriptions and quite a number subscribed.

The meeting then adjourned.

From the report of the chairman of the Executive Committee, you will see that we now have 556 members. We have secured through our legislative delegation the sum of $200.00. At our April meeting we secured individual contributions amounting to $194.50, giving us practically $400.00 with which to begin the work.

Our purpose now is to continue our monthly public meetings, to make these meetings pleasing, interesting and instructive; to employ a city nurse at once, put her to work and not to ask for any more contributions until we have demonstrated to the public the great good that this Association can and will do for this community. We mean to get the public interested, to attract the attention of every person in this county to our work, then accomplish our part in the war against the great White Plague.

I append one of our programs.

Respectfully submitted,
G. A. Neuffer,
Member for Abbeville County.

REPORT FROM CHARLESTON.

Charleston, S. C., April 1, 1909.

The members of the Anti-Tuberculosis Committee from Charleston County beg leave to report as follows:

There is a charity in the City of Charleston known as the Shina's Dispensary, which has a fund left by a Scotchman, Alexandre Shina, Esq., to minister to the sick poor of the City. The Board of Trustees of this fund maintain and support a Dispensary, where the poor are treated free of charge in special branches. This board has consented to help the Anti-Tuberculosis Committee of the State Assn. and have remodeled a building for their use. This building has just been turned over to your Committeemen and we now have a fine office furnished and ready for use. We advertise to instruct those interested in the prevention of Tuberculosis, to make diagnosis and to treat cases. Already we have had a number of applicants for relief. There is a corps of six physicians who have combined to start the work: Drs. Robert Wilson, J. C. Sosnowski, Frank Johnson, Edward Rutledge and your Committeeman.

The office is opened for one hour three times a week and patients who apply for relief are visited at their homes and their family instructed along the lines of prevention of the disease and the care of the patient. We hope to get the laity interested in the movement in the near future and propose to establish an Anti-Tuberculosis Club with the Shina's Dispensary office as headquarters.

Respectfully submitted,
John L. Dawson,
Member of Anti-Tuberculosis Committee from Charleston County and Chairman of Committee of State Association.

Chairman: What sort of a report do you want me to hand in to the Association tomorrow?

Dr. Cheyne: I move that be left entirely to the judgment of Dr. Dawson. He is thoroughly capable of writing up a report to which we will all agree. He has all the information before him, and what he will say I have no doubt we will agree to, without another meeting. Motion carried.

Dr. Hains:

Nothing succeeds like success, and these counties have reported such admirable results, particularly in reaching out into the rural districts, where ignorance is so often an obsticale to the work. I believe if special attention is called to that feature; and then again, where the financial situation has been overcome, I believe if our Chairman would call especial attention to that feature in the report, it would be well."

Chairman:

The Chairman expects to make a short report, stating all the counties that have been heard from, and the work that has been done, and the methods, in a few words. And I shall beg the Association that in those counties in which the men appointed have never attended a meeting, or shown any work along these lines, that some one else in those counties be appointed in their stead; because, if we want to live, we have to work; and there are several counties in which the man appointed as Chairman has never communicated with me, or sent in any report. So I will suggest that the Association appoint some new man in those counties for that work.. We want to get every county working, and we don't want a man who never takes notice of his appointment, attends a meeting or takes any notice of us, as chairman. I will call a meeting tomorrow.

The meeting stands adjourned.

Dr. J. Shelton Horsley, of Richmond, Va., will be present at the annual meeting of the South Carolina Medical Association to be held at Laurens on April 20th, as a guest of the Association.

Personals from Georgetown, S. C.

Dr. Airgin R. Hawkins has been spending several days in Union county with relatives.

Dr. E. C. Register is in the city, the guest of his parents on Prince street. Dr. Register received the appointment recently of first lieutenant on the medical staff of the United States army.

Journal of the South Carolina Medical Association.

FLORENCE, S. C.

PUBLICATION COMMITTEE.

Dr. O. B. Mayer, Newberry, S. C., Chairman.
Dr. F. M. Dwight, Wedgefield, S. C.
Dr. J. T. Taylor, Adams Run, S. C.

Dr. F. H. McLeod, Florence, S. C., Editor.

EDITORIALS.

In the American Journal of Obstetrics for March, Dr. C. M. Rakestraw of Savannah, Ga., under the title, Operative Technic in its Relation to Shock, gives quite a number of more or less valuable suggestions as to the prevention, by proper technique, of surgical shock.

"Many details of operative technic," he says, "too mild within themselves to cause shock, may readily be conductive to its production. Scrubbing the skin with a bristle brush is a needless source of irritation and it can also produce slight abrasions that weep serum *** A gauze swab, sterile soap, and water is all that is really necessary to cleanse the operative field. A gauze pad saturated with alcohol will answer every purpose in removing soap and fats to permit the direct action of the bichloride on the skin. *** All solutions that come in contact with the body should be warm, and the practice of flooding the patient with cold solutions *** cannot be too strongly condemned. During the operation the patient blankets and hot water bottles about should always be protected with dry the extremity and chest. ***Cold dry gauze should never be used in sponging or to pack off intestines."

Dr. Rakestraw urges that all irrigating fluids should be at the exact temperature of 115 F. and this should also be the temperature of the sponges and pads.

Jamming and stuffing the abdomen full of pads to prevent extension of infection, he says, might often be the cause of trouble.

The use of the haemosatic forceps needlessly, by the amount of tissue unduly compressed and devitalized, he notes, often puts extra work on the reparative forces of nature. Too forcible traction with instrumental retractors frequently have a similar baneful effect. Suturing the wound too tightly is also the cause of frequent failure of wound healing.

After coming out from the operation Dr. Rakestraw thinks that the patient should be placed on the veranda in the open air to hasten the recovery from the anaesthetic. Sunlight, he believes is a most valuable agent in relieving the post operative restlessness and frequently obviate

the use of opiates.

He gives his patients water freely after coming out from the anaesthetic unless this vomiting is caused by peritoneal irritation. Under the latter condition he administers it per rectum.

Following in the lead of Dr. Crile, he believes that strychnine is decidedly harmful when given on the operating table to relieve shock, and if we accept Dr. Crile's theory as to the causation of shock, his objection is well founded. At present, however, in spite of the fact that Dr. Crile's books have been on the market for some years, many good surgeons would find it hard to convince themselves that they were harming instead of helping their patients when they resorted to strychnine.

Dr. Rakestraw, while admitting that if it were possible to give morphine in doses exactly proportionate to the patients needs, it is a valuable drug, denies that it is possible to so administer it and strongly condems its use. Accepting the theory that shock is caused by a retention in the cells of toxines, he argues that morphine which favors a farther retention of these toxines, increases shock, instead of relieving it.

While many of Dr. Rakestraw's suggestions are neither new nor novel, it strikes us that his idea of getting the well protected patient out into the open air immediately after an operation is a good one, and his remarks anent the needless hauling and mauling of the tissues during an operation are certainly to the point.

It has seemed to us at times that surgeons try to see just how many things they can do with a patient short of killing him outright, and the rage for doing forty nine different operations at one sitting often leads these otherwise well disposed individuals to turn their victims wrong side out, tie their inwards in sailor's knots and half hitches, transplant the kidneys to the place where the liver ought to be, anastomose the ileum with the colon, and wind up by taking a few fancy plaits in the abdominal walls for enteroptosis. Such Gatling gun operations as these tend more towards enhancing the operator's reputation for skill than in the direction of the welfare of the patients.

Prolonged and unnecessary manipulation of the patient's vital organs necessarily vastly increases the chance of shock, and it is often much better surgery to leave something to the well known reparative power of nature, than to needlessly lengthen the operation searching for farther trouble. It is a pretty good general principle to get in, do what you went in to do, and get out as soon as possible. Sometimes the matter of a few minutes turns the scale either for or against a patient.

The treatment of mucous colitis having long proved a stumbling block to the general practitioner, the ubiquitous abdominal surgeon has stopped in and tried his hand. Some years ago the plan of hauling the appendix out through a small incision in the abdominal wall, and making it useful for the first time in its career as a tube through which the large intestine could be irrigated, was adopted, its advocates claim, with much success. Now, Dr. Geo. H. Noble, of Atlanta comes to the front with another proceedure more radical and

more startling than the earlier operation.

His plan is to make a lateral anastomosis between the ileum and the sigmond flexure of the colon, thus practically putting the transverse colon out of commission.

Arguing that mucous colitis is the result of constipation and reasoning that throwing the contents of the small intestine into the large so much nearer the rectum, is apt to overcome this condition, he proceeds to do this operation twenty seven times, with apparent good results.

This seems to us somewhat less radical than the removal of several feet of the large intestine for constipation, as has been done of late, but it certainly is a more dangerous and prolonged proceedure than the appendix irrigation method.

From the patient's standpoint, we imagine that most of them would prefer the operation following the cathartic to the cathartic following the operation.

SOCIETY REPORTS.

Manning, S. C., March 23, 1910.

The regular monthly meeting of the Clarendon County Medical Association was held at Dr. Geiger's office, the president Dr. C. E. Gamble, presided.

Dr. L. C. Stukes read a paper entitled: "The Ideal Relationship Between the Old and the Young Physician.

Dr. Brockinton reported a case of gangrene of an ovary in a girl twelve years old caused by a twist in the broad ligament.

Dr. Stukes reported a case of an hermaphrodite, who was suffering from strangulated hernia and was operated upon and the sac contained an ovary.

There was a discussion about hyoscine, morphine and cactine tablets, and opinion differed as to the safety and usefulness of this combination of drugs.

Dr. A. S. Todd, who had been elected delegate to the House of Delegates, stated that he would not be able to attend the meeting and Dr. W. M. Brockinton was elected as alternate delegate.

Members present: Drs. Brockinton, Dickson, Gamble, Geiger, Stukes and Todd.

Chas B. Geiger, Sec.

* See original article in Journal.

DEPARTMENT

OF THE SOCIETY OF MEDICAL SECRETARIES, SOUTH CAROLINA MEDICAL ASSOCIATION.

DR. ALLEN J. JERVEY, Charleston, Chairman.
DR. MARY R. BAKER, Columbia, Vice-Chairman.
DR. L. ROSA H. GANTT, Spartanburg, Sec. and Treas.

THE IDEAL RELATIONSHIP BETWEEN THE OLD AND YOUNG PHYSICIAN.*

Dr. L. C. Stukes.

Mr. President and Fellow Physicians:

This is an occasion on which I feel that is is more blessed to give than to receive, as in the presence of superior knowledge and more extensive experience it would seem a trifle presumptuous for me to submit information, therefore, I beg your indulgence while I introduce the subject which has been suggested to me. "The Ideal Relationship Between the Old and the Young Physician," which I hope you all will enlarge upon and supply the ideas which I have sought for in vain.

I know that you all are familiar with the oath which the old Grecian physician required his students to sign before teaching them the science of medicine. Even up to the Revolutionary War in this country there were only one or two attempts at organizing medical colleges, therefore, those who wished to study medicine had to apply to some physician to teach him, and had to study under and practice with him until his tutor saw fit to sign a certificate as to proficiency to practice medicine, hence the young physician started out to icine with the experienc of this older man supplementary to his own ideas. While that way of teaching at thought appears ridiculously simple, it possessed some advantages over the systematic teachings of the college of today. Unless the graduate of the college of this day is fortunate practice medicine with the experience of this older man supplementary to his own ideas. While that way of teaching at first thought appears rediculously simple, it possessed some advantages over the systematic teachings of the college of today. Unless the graduate of the college of this day is fortunate enough to have access to the advice of the more experienced physician he is somewhat at a disadvantage.

In latter years medical colleges have realized that the student must be possessed of a certain amount of

*Read before the Clarendon County Medical Association at Manning, S. C., March 23, 1910.

practical knowledge in addition to the theoretical, which is supplied in a measure by hospital training. But even then that does not provide for the emergency which continually arises in the career of the young doctor which again illustrates the necessity for experience and ofttimes "two heads." In these cases the impetuosity is balanced by the caution and conservatism of his senior.

At all times the qualities of the older and the younger man should blend well together, in originating and developing ideas, each supplying his quoto of knowledge and experience along with originality and inventiveness.

The sick chamber should develop the tenderest relationship between the senior and the junior physician in their efforts to relieve suffering, which is one of the highest missions given to man. We might compare the relationship to that of father and son, each one conceding to the other his deserts in confidence, deference, and respect. Very few of the older physicians there are who do not concede that the young man is the ultimate hope of the profession, and in turn it would be a strange kind of young man who did not sufficiently value the ripened knowledge of the old doctor.

Then, Brethren, let us strive by our actions professionally and socially to let each of us realize how dependent we all are one upon the other; and at all times be ready to supply a word of counsel here or a bit of information there, along with the gracious manner which would make it doubly valuable to the recipient, remembering the time will probably soon come when we also will need the help of our fellows. Let us always practice charity, human ethics and professional ethics must agree. We should never by word or deed lower the dignity of our noble profession, or do aught to drag its robes in the dust.

SELF HELP.*

Chas. B. Geiger, M. D., Manning, S. C.

A review of the last ten years reveals many changes for the better in the medical profession and wonderful progress has been made in the way of organization, education, and methods of practice.

Many of the towns in this State have infirmaries that would do credit to larger places and the profession in these is represented by men who devote their time to the practice of special lines that would not have been thought practicable a decade past.

The medical colleges have lengthened their courses and most of them have raised their standards, but very few of them have reached that standard of excellence as proposed by the council of medical education of the A. M. A., and it is only reasonable to suppose that the public and the profession will not be satisfied until this very necessary change for the

*Read before the Clarendon County Medical Association Dec. 22, 1909.

better is made.

We, as a profession, may justly feel proud of what we have accomplished under the leadership of McCormack, Reid and the other great leaders who made the present organization possible. By this organization we were enabled to demand a fair fee from insurance companies for medical examinations and correct other abuses that were common in the profession.

These changes in methods of practice, in the larger towns, were brought about mainly by organization and united action on the part of the profession and have worked to the great advantage of the public and the profession, in giving the public better service, and the profession a larger field for work, and greater remuneration for the improved service.

With all of these improvements there are still many evils to be corrected, one of which is the life insurance examination fee system, which is again coming up for discussion, in a demand for a smaller fee for fraternal orders. I might say here now that the fee schedule has never been carried out as it was intended originally, because, the fraternal orders, and some of the old line companies have never paid the five dollar fee, and they are still doing business in this territory.

Another evil is the traveling irregular, who advertises in the county weeklies, as has happened here recently, that he will be here only three days and is prepared to straighten cross eyes either by operating or in other ways as the patient may elect. Now who is responsible for this condition of affairs in towns of two thousand or more inhabitants? Plainly the medical profession is responsible because the people want the best service they can get and when a man advertises that he can relieve their ailments they will try his skill in the absence of a professed specialist in the regular profession. Do you blame them for partronizing these quacks? I do not, because none of us in the smaller towns prepare ourselves for treating eyes, ear, nose and throat diseases, except in a general way, and we do not give them the service that they expect and should have if the regular profession did its full duty.

Now what is the remedy against the irregular that has a State license as the one referred to above? The only remedy that I can suggest is the one given by Dr. McCormack in the November issue of the Journal S. C. M. A., that the profession in each county organize for post-graduate work and divide the specialties among each other and take special courses at the post graduate schools and hospitals in the great medical centers of this country or Europe.

The time is ripe to begin this work now and I hope Clarendon County will follow the example set by Union in this work for self improvement and education of the medical profession.

In an address to the Lexington County Medical Society, Dr. T. H. Dreher, of St. Matthews, said, "the specialists have evaded the general practitioners' field and captured every thing except his one specialty, obstetrics, and the time is not far off when these cases will be taken to infirmaries and treated as surgical and gynaecological cases are treated. He suggested that the only way for physicians in rural counties to protect

their interests was to build infirmaries and do the work themselves and keep it from going to the larger places.

Are you going to prepare yourselves for the responsible places that you occupy in the community? Are you going to meet the new condition of affairs as they should be met and reap the reward that should be yours? Are you willing to help yourself? If you are the reward will compensate you for your labor.

CREDENTIALS OF NURSES.

To The Eidtor of The Journal:

Dear Sir:

I shall ask space for insertion of some communications which I have had from the Physician's National Board of Regents in Philadelphia, with reference to the classification and credentials to be issued to nurses. This is assuming a greater importance in our State than it has in the past and it is well that the physicians of South Carolina should have full knowledge of what is going on in other States, in reference to this matter.

I enclose letters from the Regents to the profession of South Carolina and my answer, and also a copy of some resolutions which were passed at a meeting public in character, held in Philadelphia. The purposes of the meeting as published were as follows:

"To Review the Present System of Training Nurses; to Consider the Duties, obligations and Limitations of Nurses in a sick room and their Relationship to Medical Profession and the Public; and to weigh the question of State Law for the Registration of Nurses."

"Whereas, There is a growing disposition on the part of hospital nurses to insist that nursing shall be recognized by the public as a learned profession and be made a legal fact by the enactment of laws for the State registration of nurses, and that as members of a learned profession the relations between trained nurse and doctor of medicine shall be those of conference, and of equality of privilege and duty in directing the treatment and managing the affairs of the sick room, and,

Whereas, Hospital nurses, notwithstanding the claim to membership in a learned profession, are endeavoring to create a trades-union and thereby regulate the cost of their services at a minimum charge of $25 per week, and compel the public to pay the same price for the poorest nurse that is demanded for the best, or else to do without any nursing assistance, and

Whereas, The Bills for the State registration of nurses are so worded as to give autocratic power into the hands of a few nurses, three being usually specified as a majority and as a quorum for the transaction of

business, enabling them to dictate to every hospital and training school as to what shall constitute the proper education of a nurse, giving them power to reject any nurse regardless of her qualifications who may apply for registration from institutions which they are not pleased to favor, and permitting them to use the machinery of the State to stifle competition and to rivet upon the public a heartless system of nursing regulation, and,

Whereas, The attempt to secure State registration in the interest of a few persons and of a few favored institutions would, if successful, limit the supply of nurses and bring discredit, if not destruction, upon a noble calling, now therefore be it "*Resolved*:

1. That it is not necessary or desirable that nurses shall be instructed in subjects that relate almost wholly to the practice of medicine.

2. That the tendency of some nurses to assume that they are justified in interfering with the treatment or dictating to the attending physician is to be condemned, and any teaching which favors such assumption is fundamentally wrong.

3. That nurses are not competent either by education or experience to be considered as consultants, or as having equality of privilege and duty in directing the affairs of the sick-room, and any sort of legalized incompetence is dangerous.

4. That trade-unionism in nursing cannot be justified from any standpoint whatsoever, since the families of the laboring classes, and people of moderate income and the poor, would be the first to suffer; and the fixing of $25 per week as a minimum charge would be equivalent to saying that only the rich are entitled to nursing care and that others less favored can suffer or die in neglect."

Philadelphia, Mch., 19, 1910.
Robert Wilson, M. D.,
Dear Doctor:

We have been delayed in sending the enclosed resolutions in order that the plans for issuing credentials to all nurses might be perfected. This has now been accomplished. We trust you will bring the resolutions to the attention of your medical society, and if it is the pleasure of the society to approve the work we are undertaking we shall esteem it a favor if you will send us an outline of the action taken.

The plan is to classify and issue credentials to all nurses who are willing to abide by the instructions of the attending physician, and not attempt to play the role of doctor.

Four classifications will be made.

1. Commissioned and Official Nurses. (Those having completed a two year's course or more in a general hospital or training school.)

2. Approved Nurses. (Those having completed a two year's course in a special hospital.)

3. Attendant Nurses. (Those engaging in nursing, after having had only a theoretical or correspondence course of instruction.)

4. Provisional Nurses. (Those having been engaged in nursing for

a year or more, i, e., the so-called practical nurse.)

An official Calendar of Nurses, holding credentials from this Board, will be published and placed on file at every county Medical Society and copies and available for individual physicians.

If you have the names and addresses of any nurses and will send them to us, we will forward literature to them.

The disposition of many nurses to meddle with the treatment is an intolerable nuisance. There is also a wide-spread disposition to maintain high prices in a spirit of trade unionism, and to deny nursing care to the poor and to refuse to nurse people of moderate income at such rates as they can afford to pay—persons who usually need nursing care far more than the rich. We believe we can largely correct these tendencies.

We are sending you the "Status of Nurses" by Dr. Bates. Additional literature will occasionally be sent, or at any time on request.

Very respectfully,
Eugene Underhill,
President.

Physician's National Board of Regents,
1717 Chestnut Street,
Philadelphia, Pa.

Gentlemen:

I have had referred to me your letter to Dr. Robert Wilson, Jr., of Charleston, dated March 19th, in regard to the classification and credentials to be issued to nurses.

We are greatly interested in this matter and some parts of this work which you outline, I am seriously in favor of, and am desirous of taking it up in the meeting at Laurens of our State Medical Association.

However, I should like to have some more data as to your Society, whether you are incorporated or not, as to your objects of organization and any further matter that you may wish to send me.

We have just had passed a most excellent Bill for the registration of nurses, where the nurse is not the judge of her own abilities or of her sister nurse's ability, but each nurse must furnish to the State Board of Medical Examiners, satisfactory evidence of education in nursing, besides morals.

Kindly let me hear from you at as early a date as possible, and oblige,

Yours truly,
Walter Cheyne,
Secretary.

A CORRECTION.

To the Editor of The Journal:

A mistake was made in the Preliminary Program in regard to the meeting of the Association of County Secretaries. This meeting will take place Wednesday at nine a. m., April 20th. All Secretaries please take notice.

WALTER CHEYNE,
Secretary.

SOUTH CAROLINA MEDICAL ASSOCIATION.

Next Annual Meeting at Laurens, S. C., April 20, 1910.
House of Delegates Convenes April 19, at 2 p. m.

District No. 1: Charleston, Berkley, Dorchester, Colleton, and Beaufort. Councilor, Dr. J. T. Taylor, Adams Run, 1911.

District No. 2: Orangeburg, Bamberg, Lexington and Calhoun. Councilor, Dr. W. P. Timmerman, Batesburg, 1910.

District No. 3: Saluda, Newberry, Greenwood, Laurens and Abbeville. Councilor, Dr. O. B. Mayer, Newberry (Chairman of Board), 1911.

District No. 4: Anderson, Oconee, Pickens, Greenville, Spartanburg, and Union. Councilor, Dr. J. F. Wiliams, Roebuck, 1912.

District No. 5: Cherokee, York, Chester, Fairfield, Lancaster and Kershaw. Councilor, Dr. W. B. Cox, Chester, 1910.

District No. 6: Chesterfield, Darlington, Florence, Marlboro, Marion, and Horry. Councilor, Dr. William Egleston, Hartville, 1911.

District No. 7: Richland, Sumter, Clarendon, Williamsburg, Georgetown and Lee. Councilor, Dr. F. M. Dwight, Wedgefield, 1910.

District No. 8: Barnwell, Aiken, Edgefield, and Hampton. Councilor, Dr. T. G. Croft, Aiken, 1912.

Officers

President, John L. Dawson, M. D., Charleston.

1st Vice-Pres. F. H. McLeod, M. D., Florence.

2nd Vice-Pres. C. M. Rees, M. D. Charleston.

3rd Vice-Pres. A. H. Hayden, Summerville.

Treasurer, C. P. Aimar, M. D., Charleston.

Secretary, Walter Cheyne, M. D., Sumter.

TABLE OF COUNTY SOCIETIES AND OFFICERS.

Where information is wrong or lacking in the columns below County Secretaries are urged to supply it correctly to the Secretary without delay:

County.	Secretaries.	Addresses.
Abbeville	C. C. Gambrell	Abbeville, S. C.
Anderson	W. Frank Ashmore	Anderson, S. C.
Aiken	Harry H. Wyman	Aiken, S. C.
Bamberg, (1909)	J. J. Cleckley	Bamberg, S. C.
Barnwell	No Society	
Beaufort, (1909)	M. B. Cope	Port Royal, S. C.
Charleston	W. Cyril O'Driscoll	Charleston, S. C.
Cherokee	J. G. Pittman	Gaffney, S. C.
Chester	W. R. Wallace	Chester, S. C.
Clarendon	Chas. B. Geiger	Manning, S. C.
Chesterfield, (1909)	J. W. McCanless	Chesterfield, S. C.
Colleton, (1909)	T. G. Kershaw	Walterboro, S. C.
Darlington, (1909)	J. C. Lawson	Darlington, S. C.
Dorchester	John B. Johnston	St. George, S. C.
Edgefield	J. G. Edwards	Edgefield, S. C.
Fairfield, (1909)	Samuel Lindsay	Winnsboro, S. C.
Florence	Edward M. Allen	Florence, S. C.
Georgetown	J. LaBruce Ward	Georgetown, S. C.
Greenville	C. O. Bates	Greenville, S. C.
Greenwood	A. E. Mason	Greenwood, S. C.
Hampton, (1909)	C. A. Rush	Hampton, S. C.
Horry	H. H. Burroughs	Conway, S. C.
Kershaw	W. J. Burdell	Lugoff, S. C.
Laurens	Jesse H. Teague	Laurens, S. C.
Lee. (1909)	R. O. McCutchen	Bishopville, S. C.
Lexington	J. J. Wingard	Lexington, S. C.
Marion, (1909)	Z. Smith	Marion, S. C.
Marlboro	J. H. Reese	Tatum, S. C.
Newberry	Frank D. Mower	Prosperity, S. C.
Oconee	W. A. Strickland	Westminster, S. C.
Orangeburg-Calhoun	C. I. Green	Orangeburg, S. C.
Pickens	R. J. Gilliland	Easley, S. C.
Columbia, (Richland Co.)	Mary R. Baker	Columbia, S. C.
Saluda	J. D. Waters	Coleman, S. C.
Spartanburg	L. Rosa H. Gantt	Spartanburg, S. C.
Sumter	E. R. Wilson	Sumter, S. C.
Union, (1909)	R. R. Berry	Union, S. C.
Williamsburg	E. T. Kelley	Kingstree, S. C.
York	John I. Barron	Yorkville, S. C.

MEMBERS OF THE SOUTH CAROLINA MEDICAL ASSOCIATION.

The following is a list of the members of the South Carolina Medical Association, reported to the State Secretary's office up to April 5th, 1910. If your name is not on it and you are a member, consult your County Secretary.

HONORARY MEMBERS.

Dr. S. Baruch, New York, N. Y.
Dr. J. H. Musser, Philadelphia, Pa.
Dr. D. M. Prince, Laurenburg, N. C.
Dr. Jos. Price, Philadelphia, Pa.
Dr. H. O. Marcy, Boston, Mass.
Dr. Howard Kelley, Baltimore, Md.
Dr. C. U. Shepard, Summerville, S. C.
Dr. H. A. Hare, Philadelphia, Pa.
Dr. Wharton Sinkler, Philadelphia, Pa.
Dr. William T. English, Pittsburg, Pa.
Dr. Geo. Ben Johnston, Richmond, Va.
Dr. James P. Tuttle, New York, N. Y.
Dr. John B. Deaver, Philadelphia, Pa.
Dr. C. H. Chetwood, New York, N. Y.
Dr. Richard C. Cabot, Boston, Mass.
Dr. J. M. T. Finney, Baltimore, Md.

ABBEVILLE COUNTY MEDICAL SOCIETY.

President J. R. Bell; Vice-President, G. A. Neuffer; Secretary and Treasurer, C. C. Gambrell.
Delegates—W. D. Simpson.
Alternate—C. C. Gambrell.
J. A. Anderson, Autreville, S. C.
J. R. Bell, Due West, S. C.
B. H. Carlton, Donalds, S. C.
P. K. Black, Mt. Carmel, S. C.
C. C. Gambrell, Abbeville, S. C.
L. T. Hill, Abbeville, S. C.
J. C. Hill, Abbeville, S. C.
F. E. Harrison, Abbeville, S. C.
J. W. Keller, Abbeville, S. C.
D. S. Knox, Autreville, S. C.
G. A. Neuffer, Abbeville, S. C.
T. O. Kirkpatrick, Lowndesville, S. C.
J. V. Tate, Calhoun Falls, S. C.
J. W. Wideman, Due West, S. C.
J. D. Wilson, Lowndesville, S. C.
W. D. Simpson, Abbeville, S. C.

AIKEN COUNTY MEDICAL SOCIETY.

President, W. A. Whitlock; Vice-president, H. H. Towne; Secretary and Treasurer, Harry H. Wyman.
Delegates—W. A. Whitlock, T. C. Stone.
Board of Censors—A. A. Walden, W. O. Wright, T. G. Croft.
L. F. Bonner, Blackville, S. C.
D. K. Briggs, Blackville, S. C.
T. G. Croft, Aiken, S. C.
H. T. Hall, Aiken, S. C.
Filmore Moore, Montmorenci, S. C.
D. H. Swengel, Vaucluse, S. C.
C. A. Teague, Graniteville, S. C.
W. C. R. Turnbull, Langley, S. C.
H. H. Townes, North Augusta, S. C.
W. A. Whitlock, Kitchings Mill, S. C.
B. F. Wyman, Aiken, S. C.
H. H. Wyman,, Sr., Aiken, S. C.
H. H. Wyman, Sr., Aiken, S. C.
Harry H. Wyman, Aiken, S. C.
H. Hastings Wyman, Jr., Aiken, S. C.
J. A. Milhouse, Perry, S. C.
T. C. Stone, Aiken, S. C.
W. H. Moore, Kathwood, S. C.
J. B. McMillan, Graniteville, S. C.
A. A. Walden, North Augusta, S. C.
J. N. Crafton, Colliers, S. C.

ANDERSON COUNTY MEDICAL SOCIETY.

President, J. R. Young; Vice-President, R. Lee Sanders; Secretary and Treasurer, W. Frank Ashmore.
Delegates—B. A. Henry, J. R. Young, J. C. Harris.
Alternates—J. M. Richardson, W. Frank Ashmore, S. W. Page.
Board of Censors—J. L. Gray, R L. Sanders, J. O. Willhite.
W. Frank Ashmore, Anderson, S. C.
H. M. Babb, Honea Path, S. C.
W. C. Bowen, Belton, S. C.
I. J. Burris, Starr, S. C.
B. F. Brown, Williamston, S. C.
C. H. Burton, Iva, S. C.
R. B. Day, Pendelton, S. C.
W. R. Dendy, Pelzer, S. C.
J. P. Ducket, Anderson, S. C.
R. F. Divver, Anderson, S. C.
J. Louis Gray, Anderson, S. C.
C. L. Guyton, Willimaston, S. C. R. F. D.
J. C. Harris, Anderson, S. C.
W. R. Hayne, Belton, S. C.
B. A. Henry, Anderson, S. C.
S. R. Heller, Townville, S. C.

J. M. Halcomb, Belton, S. C.
W. S. Hutchison, Anderson, S. C., R. F. D.
J. T. Hunt, Townville, S. C.
Frank Lander, Williamston, S. C.
J. N. Land, Starr, S. C.
J. H. McCleskey, Pendelton, S. C.
W. H. Nardin, Anderson, S. C.
S. W. Page, Anderson, S. C.
J. W. Parker, Williamston, S. C.
W. H. Pepper, Anderson, S .C.
J. M. Richardson, Anderson, S. C.
C. F. Ross, Anderson, S. C.
R. P. Ranson, Williamston, S. C.
J. O. Sanders, Anderson, S. C.
R. Lee Sanders, Anderson, S. C.
M. B. Sullivan, Pelzer, S. C.
M. W. Strickland, Pelzer, S. C.
J. B. Townsand, Anderson, S. C.
M. A. Thomson, Anderson, S. C.
C. G. Todd, Belton, S. C.
J. E. Watson, Iva, S. C.
W. W. Watkins, Pendleton, S. C.
J. O. Willhite, Anderson, S. C.
H. B. Williams, Honea Path, S. C.
W. W. Willson, Williamston, S. C.
R. G. Witherspoon, Anderson, S. C., R. F. D.
J. R. Young, Anderson, S. C.

BARNWELL COUNTY MEDICAL SOCIETY.

L. W. Smith, Williston, S. C.
H. H. Boyd, Secretary, Allendale, S. C.
H. R. Tyson, Allendale, S. C.
O. D. Hammond, Blackville, S. C.
C. W. Erwin, Allendale, S. C.
N. F. Kuhland, Allendale, S. C.
R. C. Kuhland, Barnwell, S. C.
R. A. Gyles, Blackville, S. C.
A. B. Patterson, Barnwell, S. C.
G. W. I. Loadbolt, Jennys, S. C.
W. H. Breland, Allendale, S. C.
S. R. Hickson, Kline, S. C.
J. M. Weekley, Ulmer, S. C.

CHESTERFIELD COUNTY MEDICAL SOCIETY.

President, T. E. Lucas; Vice-President, L. E. Bull; Secretary and Treasurer, I. R. Wagner, Chesterfield.

Board of Censors—T. E. Wannamaker, 1 Year, E. A. McClellan, 3 Years, W. J. Perry, 2 Years.

Delegate—I. R. Wagner.

Alternate—E. A. McClellan.

COLLETON COUNTY MEDICAL SOCIETY.

President, James E. Scott; Vice-President, J. T. Taylor; Secretary and Treasurer, W. Erwin Sparkman.

CHEROKEE COUNTY MEDICAL SOCIETY.

President, William Anderson; Vice-President, J. N. Nesbitt; Secretary and Treasurer, J. G. Pittman.

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J. N. Nesbitt, Gaffney, S. C.
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J. T. Darwin, Gaffney, S. C.
S. B. Sherard, Gaffney, S. C.
Dr. Fort, Gaffney, S. C.
J. M. Caldwell, Blacksburg, S. C.
C. A. Jefferies, Gaffney, S. C.
B. B. Steedly, (moved to Spartanburg.)
R. T. Ferguson, Gaffney, S. C.
J. G. Pittman, Gaffney, S. C.

CHESTER COUNTY MEDICAL SOCIETY.

President, W. B. Cox; Vice-President, S. G. Miller; Secretary and Treasurer, W. R. Wallace.

Delegate—J. P. Young.

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J. G. Johnston, Chester, S. C.
T. B. Kell, Fort Lawn, S. C.
H. B. Malone, Chester, S. C.
H. E. McConnell, Chester, S. C.
C. B. McKeown, Fort Lawn, S. C.
C. A. McClurden, Chester, S. C., R. F. D. No. 2.
S. G. Miller, Chester, S. C.
S. W. Pryor, Chester, S. C.
W. R. Wallace, Chester, S. C.
A. M. Wylie, Chester, S. C.
W. Dek. Wylie, Richburg, S. C.
J. P. Young, Richburg, S. C.

CHARLESTON COUNTY MEDICAL SOCIETY.

President, A. E. Baker; Vice-President, C. P. Aimar; Treasurer, Rowlan Alston, Secretary, W. Cyril O'Driscoll.

Censors—Dr. Mullally, Wm. Henry Johnson, Chas. M. Rees.

Delegates—T. G. Simmons, Walter Burn, Allen J. Jervey.

C. P. Aimar, Charleston, S. C.
R. Alston, Charleston, S. C.
A. E. Baker, Charleston, S. C.
J. A. Ball, Charleston, S. C.
L. D. Barbot, Charleston, S. C.
E. H. Barnwell, Enterprise, S. C.
E. M. Boykin, Charleston, S. C.
A. J. Buist, Charleston, S. C.
J. W. Burn, Charleston, S. C.
R. S. Cathcart, Charleston, S. C.
John Beckman, Charleston, S. C.
G. E. Beckman, Charleston, S. C.
J. T. Borden, Charleston, S. C.
E. P. Cornell, Charleston, S. C.
J. L. Dawson, Charleston, S. C.
James Frampton, Charleston, S. C.
J. M. Green, Charleston, S. C.
N. K. Hayden, Summerville, S. C.
B. W. Hunter, Charleston, S. C.
H. F. Jackson, Charleston, S. C.
E. L. Jager, Charleston, S. C.
A. J. Jervey, Charleston, S. C.
F. B. Johnson, Charleston, S. C.
W. H. Johnson, (Wentworth St.) Charleston, S. C.
R. S. Kirk, Charleston, S. C.
C. W. Kollock, Charleston, S. C.
Lowndes Lynah, New York, N. Y.
G. F. McInnes, Charleston, S. C.
Jos. Maybank, Charleston, S. C.
M. K. Mazyck, Charleston, S. C.
J. C. Mitchell, Charleston, S. C.
Lane Mullaly, Charleston, S. C.
W. C. O'Driscoll, Charleston, S. C.
E. F. Parker, Charleston, S. C.
F. L. Parker, Jr., Charleston, S. C.
K. Pearlstine, Charleston, S. C.
C. M. Rees, Charleston, S. C.
T. W. Reynolds, Charleston, S. C.
Edward Rutledge, Charleston, S. C.
T. M. Sharlock, Charleston, S. C.
C. H. Schroder, Charleston, S. C.
J. C. Sosnowski Charleston, S. C.
C. A. Speissegger, Charleston, S. C.
A. R. Taft, Charleston, S. C.
J. F. Townsend, Charleston, S. C.
T. P. Whaley, Charleston, S. C.
Robt. Wilson, Charleston, S. C.
G. F. Wilson, Charleston, S. C.
D. M. McGuire, Charleston, S. C.
E. H. Sparkman, Charleston, S. C.
J. C. Waring, Charleston, S. C.
G. M. Pollitzer, Charleston, S. C.
J. S. Rhame, Charleston, S. C.
S. F. Mood, Charleston, S. C.
A. C. Wildhagen, Charleston, S. C.

Honorary Members.

J. Sommers Buist, Charleston, S. C.
R. L. Brodie, Charleston, S. C.
A. R. Fitch, Charleston, S. C.
John Forrest, Charleston, S. C.
Francis L. Parker, Sr., Charleston, S. C.
W. Peyre Porcher, Charleston, S. C.
Manning Simons, Charleston, S. C.
T. Grange Simons, Charleston, S. C.
J. L. Dawson, Charleston, S. C.

CLARENDON COUNTY MEDICAL SOCIETY.

President, C. E. Gamble; Vice-President, A. S. Todd; Secretary and Treasurer, Chas. B. Geiger.

Delegates—A. S. Todd. Alternate—H. L. Wilson.

Board of Censors—I. M. Woods, Thos W. Gunter, W. M. Brockinton.

W. M. Brockinton, Manning, S. C.
W. E. Brown, Manning, S. C.
G. L. Dickson, Manning, S. C.
Chas. B. Geiger, Manning, S. C.
A. S. Todd, Manning, S. C.
T. J. Davis, Summerton, S. C.
W. M. Mood, Summerton, S. C.
L. C. Stukes, Summerton, S. C.
I. M. Woods, New Zion, S. C.
C. E. Gamble, Tuberville, S. C.
H. L. Wilson, Jordan, S. C.
Thos. W. Gunter, Paxville, S. C.
W. E. Hicks, Timmonsville, S. C.

DILLON COUNTY MEDICAL SOCIETY.

President, Thos. D. Smith; Vice-President, J. G. Rogers; Secretary and Treasurer, D. M. Michaux.

Delegate—L. R. Craig.

Board of Censors—D. M. Michaux, H. A. Edwards, L. F. Johnson.

Thos. H. Smith, Dillon, S. C.
C. Henslee, Dillon, S. C.
L. R. Craig, Dillon, S. C.
L. F. Johnson, Dillon, S. C.
D. M. Michaux, Dillon, S. C.
B. M. Badger, Dillon, S. C.
N. N. Schofield, Fork, S. C.

DORCHESTER COUNTY MEDICAL SOCIETY.

President, Edmund W. Simons; Vice-President, W. P. Shulor; Secretary, John B. Johnson.

Delegate—John B. Johnson, and one to be elected.

Treasurer, Elias D. Tupper.

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J. D. Conner, Smoaks, S. C.
J. L. B. Gilmore, Holly Hill, S. C.
W. F. Graham, Summerville, S. C.
G. B. Harley, Dorchester, S. C.
A. A. Horger, Harleyville, S. C.
Carlisle Johnson, St. George, S. C.
A. R. Johnson, Reevesville, S. C.
G. A. T. Johnson, Ridgeville, S. C.
John B. Johnston, St. George, S. C.
P. M. Judy, St. George, S. C.
S. T. Lea, Holly Hill, S. C.
H. B. Lee, Summerville, S. C.
W. M. Moorer, Lodge, S. C.
Julius A. Parker, Branchville, S. C.
S. P. Reutz, Branchville, S. C.
W. P. Shulor, Grover, S. C.
Edmund W. Simons, Summerville, S. C.
Elias D. Tupper, Summerville, S. C.
W. B. Way, Ridgeville, S. C.
S. P. Wells, Holly Hill, S. C.
Jno. S. Wimberly, Branchville, S. C.
P. Mellard, St. George, S. C.
J. F. Moorer, St. George, S. C.

DARLINGTON COUNTY MEDICAL SOCIETY.

President, G. B. Edwards; Vice President, T. E. Howle; Secretary, J. C. Lawson, Treasurer, J. L. Powe.

Delegates—C. C. Hill, J. T. Coggeshall.

Board of Censors— S. F. Parker, J. F. Watson and E. T. Barrentine.

W. A. Carrigan, Society Hill, S. C.
C. C. Hill, Darlington, S. C.
J. C. Lawson, Darlington, S. C.
G. B. Edwards, Darlington, S. C.
John Lunny, Darlington, S. C.
A. T. Baird, Darlington, S. C.
W. L. Galloway, Darlington, S. C.
A. M. Hill, Darlington, S. C.
J. T. Coggeshall, Darlington, S. C.
J. F. Watson, Lamar, S. C.
William Egleston, Hartsville, S. C.
S. Beckham, Hartsville, S. C.
T. E. Howle, Hartsville, S. C.
J. L. Powe, Hartsville, S. C.
P. P. Chambers, Hartsville, S. C.
E. T. Barrentine, Society Hill, S. C.
J. W. Williamson, Society Hill, S. C.
S. F. Parker, Lamar, S. C.
S. L. Parnell, Lamar, S. C.
S. W. Willamson, Dovesville, S. C.
R. B. Stich, Lamar, S. C.
J. M. Earle, Darlington, S. C.
J. W. Wilcox, Darlington, S. C.
W. J. Beasley, Hartsville, S. C.
S. D. Harrell, Lamar, S. C., R. F. D. No.1.

EDGEFIELD COUNTY MEDICAL SOCIETY.

President, J. W. Rushton; Secretary and Treasurer, J. G. Edwards.

Delegates—W. D. Ouzts, S. A. Morrall.

J. C. Tomkins, Edgefield, S. C.
R. A. Marsh, Edgefield, S. C.
J. T. Hunter, Trenton, S. C.
J. H. Charmichael, Edgefield, S. C.
A. R. Nicholson,
J. H. Self, Pleasant Lane, S. C.
J. N. Crafton, Collier, S. C.
G. D. Walker, Johnston, S. C.
J. G. Mobley,
J. W. Rushton, Johnston, S. C.
J. G. Edwards, Edgefield, S. C.
W. D. Ouzts, Waycross, S. C.
S. A. Morrall, Trenton, S. C.

GEORGETOWN COUNTY MEDICAL SOCIETY.

President, M. P. Moorer; Vice-President, H. D. Beckman; Secretary and Treasurer, J. LaBruce Ward.

Board of Censors—F. A. Bell, W. M. Gaillard, M. P. Moorer.

H. D. Beckman, Georgetown, S. C.
F. A. Bell, Sampit, S. C.
A. B. Clarke, Plantersville, S. C.
J. W. Folk, Jessup, S. C.
W. M. Gaillard, Georgetown, S. C.
T. R. Howle, Rosemary, S. C.
M. P. Moorer, Georgetown, S. C.
Olin Sawyer, Georgetown, S. C.
J. LaBruce Ward, Georgetown, S. C.

GREENWOOD MEDICAL SOCIETY.

President, H. N. Sloane; Vice-President, S. L. Swygert; Secretary and Treasurer, R. E. Mason.

Delegate—G. P. Neel.

Alternate—John Lyon.

W. P. Barrett, Greenwood, S. C.
S. L. Swygert, Greenwood, S. C.
J. B. Hughey, Greenwood, S. C.
G. P. Neel, Greenwood, S. C.
R. B. Epting, Greenwood, S. C.
J. B. Workman, Ware Shoals, S. C.
Willie T. Jones, Jones, S. C.
R. E. Mason, Greenwood, S. C.
J. E. Brunson,

GREENVILLE COUNTY MEDICAL SOCIETY.

President, E. W. Carpenter; Vice-President, W. Y. McDaniel; Secretary, C. O. Bates; Treasurer, R. D. Smith.

Delegates—Dr. C. B. Earle.

T. W. Bailey, Greenville, S. C.
C. O. Bates, Greenville, S. C.
W. C. Black, Greenville, S. C.
J. C. Brawley, Greenville, S. C.
E. W. Carpenter, Greenville, S. C.
W. M. Burnett, Greenville, S. C.
L. G. Corbett, Greenville, S. C.
W. H. Delk, Greenville, S. C.
H. T. Dacus, Greenville, S. C.
J. B. Duckett, Fountain Inn, S. C.
T. T. Earle, Greenville, S. C.
C. B. Earle, Greenville, S. C.
J. B. Earle, Greenville, S. C.
D. Furman, Greenville, S. C.
C. W. Gentry, Greenville, S. C.
C. T. J. Giles, Greenville, S. C.
B. F. Goodlet, Travelers Rest, S. C.
E. B. Hendrix, Reedy River, S. C.
S. E. Holtzclaw, Greer, S. C.
F. G. James, Greer, S. C.
F. Jordan, Greenville, S. C.
C. C. Jones, Greenville, S. C.
J. W. Jervey, Greenville, S. C.
T. R. Teague, Greenville, S. C.
L. O. Mauldin, Greenville, S. C.
W. L. Muldin, Greenville, S. C.
R. L. Marchant, Greer, S. C.
J. E. McKinney, Greenville, S. C.
W. Y. McDaniel, Taylors, S. C.
J. L. Orr, Greenville, S. C.
L. L. Richardson, Simpsonville, S. C.
R. D. Smith, Greenville, S. C.
H. L. Shaw, Fountain Inn, S. C.
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G. T. Swandale, Greenville, S. C.
T. E. Stokes, Greenville, S. C.
J. R. Ware, Greenville, S. C.
A. White, Mauldins, S. C.
W. E. Wright, Greenville, S. C.
A. Wallace, Greenville, S. C.

HORRY COUNTY MEDICAL SOCIETY.

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Delegate—J. S. Dusenbury.

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H. H. Burroughs, Conway, S. C.
Evan Norton, Conway, S. C.
James A. Norton, Conway, S. C.
J. S. Dusenbury, Conway, S. C.
A. B. Walters, Galivants Ferry, S. C.
E. A. Stalvey, Stalvey, S. C.
J. K. Stalvey, Bucksport, S. C.
H. T. Kirby, Loris, S. C
W. E. McCord, (D. D. S.) Conway, S. C.

KERSHAW COUNTY MEDICAL SOCIETY.

President, S. C. Zemp; Vice-President, W. R. Clyburn; Secretary and Treasurer, W. J. Burdell.

Delegate—W. J. Burdell.

S. F. Barrington, Camden, S. C.
W. J. Burdell, Lugoff, S. C.
A. W. Burnett, Camden, S. C.
J. W. Corbett, Camden, S. C.
W. R. Clyburn, Camden, S. C.
W. J. Dunn, Camden, S. C.
J. T. Hay, Boykin, S. C.
W. D. Griggsby, Blaney, S. C.
A. A. Moore, Camden, S. C.
Sidney C. Zemp, Camden, S. C.

Dr. Moore is a life member of State Society.

LEE COUNTY MEDICAL SOCIETY.

President, A. C. Baskins; Vice-President, Dr. Yellott; Secretary, R. O. McCutchen.

Delegate—L. H. Jennings. Alternate—C. W. Harris.

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A. C. Baskins, Bishopville, S. C.
B. L. Harris, St. Charles, S. C.
C. W. Harris, Bishopville, S. C.
Dr. Yellott, Lynchburg, S. C.
R. O. McCutchen, Bishopville, S. C.

LAURENS COUNTY MEDICAL SOCIETY.

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Delegates—W. D. Ferguson, T. L. W. Bailey.

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H. D. Aiken, Laurens, S. C.
T. L. W. Bailey, Clinton, S. C.
A. J. Briggs, Clinton, S. C.
W. L. Bailey,
J. W. Beason, Gray Court, S. C.
A. J. Christopher, Laurens, S. C.
J. W. Davis, Clinton, S. C.
W. H. Dial, Laurens, S. C.
J. L. Donnan, Laurens, S. C.
W. D. Ferguson, Laurens, S. C.
J. L. Fennell, Waterloo, S. C.
A. R. Fuller, Mountville, S. C.

R. E. Hughes, Laurens, S. C.
J. H. Miller, Cross Hill, S. C.
J. M. Owens, Cross Hill, S. C.
E. W. Pinson, Cross Hill, S. C.
T. J. Peake, Cross Hill, S. C.
C. E. Rogers,
C. A. Saxon, Clinton, S. C.
Jesse H. Teague, Laurens, S. C.
E. F. Taylor, Renno, S. C.
J. M. Wallace,
I. Schayer, Laurens, S. C.
J. P. Wilbur, Waterloo, S. C.
W. H. Young, Clinton, S. C.
J. Lee Young, Clinton, S. C.
J. W. Young, Clinton, S. C.
J. R. Culbertson, Grey Court, S. C.
C. D. East., Goldville, S. C.

LEXINGTON COUNTY MEDICAL SOCIETY.

President, F. R. Geiger; Vice-President, R. E. Mathias; Secretary and Treasurer, J. J. Wingard.
Delegate—J. J. Wingard.
Board of Censors—R. H. Timmerman, H. G. Eleazer, J. P. Drafts.

L. C. Brooker, Wansea, S. C.
D. M. Crosson, Leesville, S. C.
J. P. Drafts, Barr, S. C.
H. G. Eleazer, Peak, S. C., R. F. D.
J. W. Eargle, Chapin, S. C. R. F. D.
F. R. Geiger, New Brookland, S. C.
J. W. Geiger, New Brookland, S. C., R. F. D.
D. R. Kneece, Pelion, S. C.
W. L. Kneece, Baxter, S. C.
J. R. Langford, Sewansea, S. C.
R. E. Mathias, Irmo, S. C.
G. F. Roberts, Lexington, S. C.
Jos. L. Shulor, Selwood, S. C.
R. H. Timmerman, Batesburg, S. C.
W. P. Timmerman, Batesburg, S. C.
J. J. Wingard, Lexington, S. C.

MARLBORO COUNTY MEDICAL SOCIETY

President, J. A. Faison; Vice-President, J. P. Bell; Secretary and Treasurer, J. H. Reese.
Delegate—Chas. D. Napier.

J. A. Faison, Bennettsville, S. C.
J. P. Bell, McColl, S. C.
J. H. Reese, Tatum, S. C.
Chas. D. Napier, Blenheim, S. C.
J. L. Napier, Blenheim, S. C.
L. B. Salters, Blenheim, S. C.
W. J. Crosland, Bennettsville, S. C.
J. F. Kinney, Bennettsville, S. C.
Chas. R. May, Bennettsville, S. C.
A. S. Townsend, Bennettsville, S. C.
Douglas Hamer, McColl, S. C.
J. C. Moore, McColl, S. C.
J. A. Woodley, Tatum, S. C.
W. M. Reedy, Clio, S. C.
J. A. Hamer, Clio, S. C.
C. S. Evans, Clio, S. C.

NEWBERRY COUNTY MEDICAL SOCIETY.

Secretary, Frank D. Mower, Newberry, S. C. Delegates—W. G. Houseal. Alternate—W. E. Pelham, Newberry, S. C.

ORANGEBURG - CALHOUN COUNTY MEDICAL SOCIETY.

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Delegates—L. C. Shecut, A. W. Browning.
Board of Censors—M. G. Salley, A. R. Able, A. W. Browning.

W. L. Pow, St. Matthews, S. C.
M. J. D. Dantzler, Elloree, S. C.
C. I. Green, Orangeburg, S. C.
W. R. Lowman, Orangeburg, S. C.
A. R. Bable, St. Matthews, S. C.
A. R. Able, St. Matthews, S. C.
T. H. Dreher, St. Matthews, S. C.
J. K. Fairy, St. Matthews, S. C.
L. B. Bates, St. Matthews, S. C.
T. H. Symmes, St. Matthews, S. C.
Sophia Brunson, Elloree, S. C.
A. W. Browning, Elloree, S. C.
J. T. Green, Elloree, S. C.
P. L. Felder, Elloree, S. C.
W. H. Lawton, Vances, S. C.
A. P. Traywick, Cameron, S. C.
G. W. Neville, Rowesville, S. C.
D. R. Sturkie, North, S. C., R. F. D.
T. C. Doyle, Orangeburg, S. C.
T. A. Jeffords, Orangeburg, S. C.
J. M. Oliver, Orangeburg, S. C.
L. K. Sturkie, Orangeburg, S. C.
L. C. Schecut, Orangeburg, S. C.
M. G. Salley, Orangeburg, S. C.
D. D. Salley, Orangeburg, S. C.
Geo. H. Walter, Orangeburg, S. C.
J. G. Wannamaker, Orangeburg, S. C.
J. T. Carter, Bowman, S. C.

OCONEE COUNTY MEDICAL SOCIETY.

President, W. R. Doyle; Vice-President, J. J. Thode; Secretary and Treasurer, W. A. Strickland.

Delegates—E. C. Doyle. Alternate—C. M. Walker.

Board of Censors—E. A. Hines, J. W. Wickliffe, H. E. Rosser.

C. M. Walker, Westminster, S. C.
W. A. Strickland, Westminster, S. C.
E. A. Hines, Seneca, S. C.
H. E. Rosser, Westminster, S. C.
J. R. Heller, Fair Play, S. C.
J. S. Stribling, Seneca, S. C.
W. R. Doyle, Seneca, S. C.
J. W. Wickliffe, West Union, S. C.
B. F. Sloan, Walhalla, S. C.
J. W. Bell, Walhalla, S. C.
E. C. Doyle, Seneca, S. C.
A. M. Readfern, Clemson College, S. C.
J. J. Thode, Walhalla, S. C.

MEDICAL SOCIETY OF COLUMBIA.

President, S. C. Harmon; Vice-President, R. A. Lancaster; Secretary and Treasurer, Mary, R. Baker.

Delegates—William Weston, W. A. Boyd, F. A. Coward.

Censors—J. H. McIntosh, D. S. Pope, S. B. Fishburne.

E. C. L. Adams, Columbia, S. C.
J. W. Babcock, Columbia, S. C.
Mary R. Baker, Columbia, S. C.
C. W. Barron, Columbia, S. C.
D. S. Black, Columbia, S. C.
A. E. Boozer, Columbia, S. C.
W. A. Boyd, Columbia, S. C.
G. H. Bunch, Columbia, S. C.
F. W. P. Butler, Columbia, S. C.
W. M. Carn, Columbia, S. C.
Hubert Clayton, Columbia, S. C.
F. A. Coward, Columbia, S. C.
T. M. DuBose, Columbia, S. C.
F. M. Durham, Columbia, S. C.
S. B. Fishburne, Columbia, S. C.
W. E. Fulmer, Columbia, S. C.
R. W. Gibbes, Columbia, S. C.
H. H. Griffin, Columbia, S. C.
L. A. Griffith, Columbia, S. C.
Legrand Guerry, Columbia, S. C.
Jane B. Guignard, Columbia, S. C.
S. E. Harmon, Columbia, S. C.
L. M. Hook, Eastover, S. C.
Henry Horlbeck, Columbia, S. C.
C. L. Kibler, Columbia, S. C.
A. B. Knowlton, Columbia, S. C.
Oscar LaBorde, Columbia, S. C.
R. A. Lancaster, Columbia, S. C.
W. M. Lester, Columbia, S. C.
Jas. H. McIntosh, Columbia, S. C.
A. A. Madden, Columbia, S. C.
P. V. Mikell, Columbia, S. C.
R. L. Moore, Columbia, S. C.
H. A. Odom, Springfield, S. C.
C. J. Oliveros, Columbia, S. C.
L. B. Owens, Columbia, S. C.
P. A. Phillips, Springfield, S. C.
L. K. Philpot, Springfield, S. C.
D. S. Pope, Springfield, S. C.
H. W. Rice, Springfield, S. C.
A. E. Shaw, Springfield, S. C.
G. C. Stuart, Eastover, S. C.
J. H. Taylor, Columbia, S. C.
J. L. Thompson, Columbia, S. C.
J. J. Watson, Columbia, S. C.
William Weston, Columbia, S. C.
E. M. Whaley, Columbia, S. C.
C. F. Williams, Columbia, S. C.
Eleanor B. Saunders, Columbia, S. C.
Wm. C. Abel, Columbia, S. C.

PICKENS COUNTY MEDICAL SOCIETY.

President, W. M. Sheldon; Vice-President, C. N. Wyatt; Secretary and Treasurer, R. J. Gilliland.

Delegate—W. A. Tripp.

W. M. Sheldon, Liberty, S. C.
W. A. Long, Liberty, S. C.
W. A. Woodruff, Cateechee, S. C.
L. G. Clayton, Central, S. C.
L. T. Shirley, Central, S. C.
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To avoid troublesome hemorrhage in operations for tuberculous glands of the neck first expose the internal jugular vein.

An apparently superficial tumor of the chest wall may be an intrathoracic growth that has reached the surface; an *x*-ray picture is indicated in any such tumor before its attempted removal.

By constipating the patient, a high-seated rectal carcinoma may be pushed down within reach of the examining finger in the rectum. A *small* enema may balloon such a tumor within reach of abdominal palpation.

Preparatory to, and following, operations upon the brain or spinal cord hexamethylenamene ("urotropin") should be administered in liberal formaldehyde then appears in the cerebrospinal fluid, and thereby minimizes the danger of infection.—American Journal of Surgery.

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115 FULTON ST., NEW YORK

The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, FLORENCE, S. C.

Entered as second-class matter June 2, 1909, at the Postoffice at Florence, S. C., under the Act of Congress of March 5, 1879.

ANNUAL SUBSCRIPTION, $2.00.

VOL. VI. APRIL, 1910. No. 4

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

Business communications relating to subscriptions and advertising should be addressed to

JOURNAL S. C., MED. ASS'N., FLORENCE, S. C.

ORIGINAL ARTICLES.

THE NEED OF BETTER EDUCATION IN PREPARATION OF THE STUDY OF MEDICINE.*

President's Address—John L. Dawson., M. D.

Fellow members of the South Carolina Medical Association:

Before beginning the annual address which our Constitution demands that I should inflict upon you, I wish again to thank you for the compliment that you have conferred upon me in electing me your president, the highest honor in the gift of the medical profession of the State. Having been absent from the State, for nearly three years, because of ill health, and having, through force of circumstances, been unable to attend many meetings of the association of late years, I feel that this compliment has been paid me chiefly by the younger men of the profession to whom I have had the good fortune

*Read before the South Carolina Medical Association at Laurens, S. C., April 20th, 1910.

to lecture and who have been my pupils. They have also honored me in the stand that they have taken in their chosen profession; they are a credit to their Alma Mater, and it is always a keen pleasure to me to follow their various successes and applaud their good work. It is to these young men I offer my thanks today and it is to the many others that are to follow in their footsteps that I propose to address my remarks now.

I will not follow the common custom of discussing concrete matters for the betterment of our Association and of the profession in the State, or of offering suggestions as to its government or management but I wish to make a plea for the general advancement of medical education, and when I use the terms medical education, I use it in its broadest sense, meaning general education of the medical man. I desire to see in the State of South Carolina a better educated medical student. If you will go to our dear old college and look back at its records you will find that in its early days the student of medicine was required at his examination to write a thesis, the subject chosen by himself. These theses have been kept by the college, and they are remarkable; they show a degree of learning apart from medicine that should make the medical student of the present day blush. Many of them are written in Latin, Greek, German and French, and show an amount of research and study beyond the average ability of our present class of applicants for a medical diploma. Why is this? Why this change in the class of men taking up the study of medicine as their chosen profession?

There are two reasons, as far as I can see, the first is that the men have not the money to take collegiate courses before taking up a medical course and the second reason is that the young men want to graduate too early. They study medicine to make a living only, by any means in their power, and if this state of things continue, medicine will cease to be a profession and become a trade. The tendency today is towards specialism; and the passing of that beautiful character, the family physician, that writers from time immemorial have delighted to honor in their descriptions, is too evident. The old doctor who was educated on all points, to whom everyone in the village would go for information on any subject, the advisor and confidant of parents and children alike; who could always be counted on to entertain visitors by a discussion of almost any subject, a raconteur with a keen sense of humor, and an appreciation of religion; a well read man of diversified attainments,—do we find him now? Only very, very occasionally.

In this present day rush after money and reputation when our one idea is to make all we can, we have not time for a general education. How often do you hear men say that the study of the dead languages is not necessary for the study of medicine and that the study of modern languages is not absolutely essential. How many young men starting out to study medicine ever think of studying anything along other lines? Do they care if they cannot enter into conversation with cultivated people? Are they ashamed if they cannot discuss literature, music or art? Can they even entertain themselves outside of medical topics? Do they try to travel and find out what others are

like? "Home-keeping youths have ever homely wits" Shakespeare says. But above all, is the average medical student of today the possessor even of an ordinary education attainable at a high school or small college? He is not in this State, and I speak this to your shame.

Money is essential to existence and the medical man must make his living by his brain and skill equally as well as the laborer by his muscle and brawn; but brain without cultivation is a poor possession, and the skill of the uneducated is looked upon with suspicion.

This condition of affairs does not hold everywhere; it is much more marked in our Southern States than in other parts of this country. The necessity of general education does not appeal to the medical student in the South as it does in the North and West. Take the general average of the medical students of the Southern States and compare them with those of the Northern, and you will readily note the difference.

We must realize the fact that our young men go into medicine for a living only too hastily, and as a result we have an over-crowding of the profession, too many uneducated doctors dragging down the professional standard of medicine. It was Prof. Ferrero, the eminent historian of Rome, (if I mistake not) who in a recent publication criticised the lack of education amongst American physicians as compared with the physicians of Europe. Although they stand high in their skill as medical men and hold their own in comparison with any country in the world, yet they surely lack general education and do not take the position in general life that should be accorded them.

Every man who raises a son for any profession in life should start with an early education of the boy. He should commence his training for his chosen profession with his earliest school days. The theologist, the jurist, the physician, no matter what his profession be, he should have found his perculiar adaptation to some secondary line of work and cultivate himself in it. Would it not be a splendid thing had each one of us taken up some special line of study along with medicine? If the youth is musical why not cultivate his musical talent or at least let him study the theories of music. If he be artistic, let him study art. If his bent seems to be literature or the languages, let him read along those lines. Every man should be able to be good company for himself before he can be good company for others; and one needs more than his profession alone to shine in a company of educated and cultivated pepole. Compare for yourself the medical profession and the legal profession; which do you think presents as a rule the best educated and generally cultivated men? This condition should not exist but it will continue just so long as we take boys with nothing but a poor school education and plunge them at once into the study of medicine.

In discussing this subject with a friend on one occasion he used this fallacious argument in support of his opinion. He said that in a village or at the cross-roads we expected to find a black-smith, not a skilled mechanic; that a skilled mechanic would be wasted amongst uneducated people in small factory towns—what was wanted there was a good practical doctor, not a highly educated man.

This is the argument that places the practice of medicine on the plane of a trade by which to make a wholesome living. This is the kind of idea that lowers the standard of our profession. Think of how much more good the skilled mechanician could accomplish than the black-smith amongst these lowly people. An educated and cultivated man in a community must elevate the people with whom he associates, his cultivation raises him in the estimation of his inferiors and he can thereby accomplish more good; it makes him more acceptable to his equals; it maintains his own self-respect. How mortifying it is not to be able to discuss the ordinary topics of refined society because of ignorance. No matter how good a physician you are, how able a surgeon you many be, you need something more. Cultivation stands for mental gentility—you all remember the old English nursery rhyme—"Gentility without ability is like a pudding without the fat, but ability without gentility, is worse than that."

Our modern tendencies are too realistic and we are letting go the ideal. Invertebrate idealism I grant you is a poor plaything, but we should not stamp out altogether the ideals that we naturally possess. He is the lucky and successful individual who can happily combine an idealistic mind with realistic action. Our ideals must not be choked off, we must work up to them and not smother them. Our realistic life should be governed by idealism. Your answer to this might be that our chief realistic idea is to procure bread and butter; but why not try occasionally to procure a small bit of cake? The necessary bread and butter will come with work, but the man who can vary the monotony of this essential diet with an occasional sweet-meat is going to enjoy life much more. Of course, we must live and by our professional work support dependents, but let not this one idea crowd out all others.

Be satisfied to earn a little and spend a little less; to take a little more time for reading and cultivation; to travel a little more and mingle with your betters. Attrition with ones superiors will teach one more than he could ever learn by simple study alone.

But what are we going to do now? The profession is daily becoming overcrowded and the colleges are graduating numbers of uneducated young men yearly. How can we control this undesirable output? I should suggest that our Board of Medical Examiners take the matter in their own hands. We cannot blame the colleges; their success depends on the number of their students, for they are self-supporting institutions and not endowed, and they must have students to meet expenses. The labor of the professors amounts almost to a labor of love, so slight is the remuneration for their services; it would therefore be against human nature for them to be too critical in the choice of their students' preliminary education. We must look to the State Board of Examiners to correct this evil. They should be equally as well qualified to judge of a candidate's general preliminary education and fitness to apply for a degree in medicine as they are to judge of his medical education only. Why not demand of each applicant who cannot show a B. A. degree from a college that he write a short impromptu essay on a subject given to him after he enters

the examining room; just some short paper to show that he can at least write his own language grammatically and can express himself on some simple subject. This would help out matters somewhat and many would be careful before they attempted it. It would weed out some of the undesirables and take from the profession the stigma of the unfortunately too true criticism that we graduate doctors who are uneducated men.

The woeful lack of preliminary education in the average medical student must be apparent to all of you. Many of them who are unprepared to take up the study of a profession, apply as matriculates at the colleges; they study hard; they do practical laboratory work; they attend the clinics and lectures and they learn medicine, and when they come up before the examining board, they make the average required for graduation. But ask some of these men to write an ordinary letter, ask them some simple facts of history; ask them what they have read before they began the study of medicine and you will find that many of them have practically no education at all. They are unable to read or write their own language correctly, much less a foreign one. I do not mean to argue for great cultivation as a necessity, but only for a good plain education. We would all like to be cultivated and should strive to be so, but we all must be educated —this is the necessity that confronts us.

I .know that it is very easy to criticise and to offer theories for the betterment of conditions, but I feel it my duty to call to your attention this present day tendency to allow men unfit to take up medicine as a life work, men who are not qualified to enter this great and noble profession, and suggest that this Association take this matter up for serious consideration. If I might be permitted to paraphrase and perhaps mutilate that beautiful verse of the L'Envoi I would describe the millenium of the physician as having arrived when

"None but the Master shall praise him,
And none but the Master shall blame,
And he shall not work for money,
And he shall not work for fame,
But he'll work for the joy of the working,
And each in his separate sphere
Shall do the work as he sees it
For the God he doth love and fear."

THE PRESENT STATUS OF BACTERIAL IMMUNIZATION.*

By A. M. Brailsford, M. D. Mullins, S. C.

When invited to read a paper before the Pee Dee Medical Association I felt keen pleasure at being so highly honored. But when I discovered that I had only ten days in which to prepare an article, my elation gave place to a condition of vital depression, manifesting symptoms of that peculiar and distressing variety of shock known as the erethistic type.

*Read before the Pee Dee Medical Association, March 31st, 1910.

You can readily perceive that I have not yet recovered.

While in a state of panic, wildly floundering for a subject around which to rally my demoralized ideas, I finally chose Bacterial Immunization. I had been studying and working a little bit along that line and had just returned from the North after a brief visit to one of the large medical centres where Bacterin Therapy is being scientifically developed.

Such an important subject deserves a better champion, but I trust that this imperfect paper will awaken sufficient interest to stimulate a spirit of investigation among those who have not given much thought to this method of treatment.

Whenever an important discovery in medicine is announced there is a tendency to over-valuation of its merits, the pendulum of applicability and utility swings too far, disappointment and chagrin result, and what is, perhaps, a very valuable therapeutic measure passes out of general use, and for a season, sinks almost into oblivion. Fortunately, time and experience finally rescues it and gradually shape its destiny.

This was notably the case in Tuberculin Therapy which was so enthusiastically heralded to play a star role in the treatment of consumption. Disastrous, indeed, were the results from its indiscriminate employment, until it has at last found its proper place in the treatment of chronic non-febrile cases as an adjunct to the usual remedies.

Bacterin Therapy in general has been a victim of the same evil. Ignorance or a misapplication of the treatment has been responsible for placing active immunization in disrepute among some physicians.

In order to employ the remedy in a safe and rational manner, it is necessary to have a definite idea of what Bacterin Therapy really means. "It is the introduction of dead cultures of the Bacteria causing the infection in the hope of stimulating the body cells to produce antibodies. It is to whip up sluggish and indolent cells to perform their duty, not to regenerate or build up exhausted defences." The practical application to the treatment of infections by means of vaccines made of suspensions of dead bacteria is based upon the discovery by Metchnikoff of phagocytosis and the study of opsonins by Wright and Douglas.

Metchnikoff found that the destruction of micro-organism was brought about by the ingestion by phagocytes, especially polymorphonuclear-leucoeytes. Denys and LeClef proved that it is necessary for the bacteria to be acted upon by a substance in the blood serum before this process of destruction can take place. Wright and Douglas named this sensitizing substance, "Opsonin" and elaborated methods for its study in the laboratory by which a patient's ability to manufacture antibodies—Opsonin—can be estimated, the result being know as his, Wright's, opsonic index.

A little digression may be permissible right here to remark that the researches of these men in addition to giving us Bacterin-therapy have had far wider and more beneficient influence upon the medical world, in as much as they have taught us to entertain the profoundest respect for the natural resisting forces of the body, thus modifying to a considerable extent, the attitude of the

physician toward the patient.

Instead of filling the victim's stomach with vile and noxious drugs, giving little or no thought to his strength and comfort, with the hope of finding some remedy that may effect a cure, physicians and surgeons now recognize that the patient is his staunchest ally and if his vital forces are kept up to the highest possible degree of efficiency, recovery is apt to result.

To determine precisely in what class of affections and in what stage of their progress bacterin therapy shall and shall not be utilized is a problem shrouded in many difficulties, for so variable has been the application of the treatment that results necessarily differ. But it seems practically a settled fact that its widest field of usefulness is found in prophylaxis—especially, in regard to Typhoid fever, and in subacute and chronic affections due to microbic invasions, and also in a few acute diseases of a local or superficial type.

In chronic cases the causitive organisms are usually of comparatively low virulence, and, although autoinoculations have been constantly taking place, the immunizing machinery of the body has never been sufficiently stimulated thereby at any one time to produce a sudden attack which would result in a spontaneous cure as occurs in the crisis of pneumonia.

If in these conditions the proper bacterin is used, supplying the necessary stimulus to the immunizing property of the blood, a crisis will result.

In acute infections where bacteremia is present it would seem not only unscientific from the standpoint of anaphylaxis to employ this, but positively detrimental to the patient. In such cases the autogenous antigen has already induced a condition of hypersusceptibility, when according to the theory of Vaughn, "Albumen in the body is broken up into the toxic and non-toxic group, and if dead bacteria are injected, the body attacks the albumen so vigorously and releases so much of the toxic group, that it is overcome by the poisonous radicle." Later in the course of the disease, should the patient survive the acute stage, bacterin therapy may be used with decided benefit.

In no one phase of medicine do excellent judgment and keen power of observation count for so much as in the injection of dead bacteria in the treatment of disease. The opsonic index is seldom used as a guide in bacterin therapy. It has been abandoned as a routine even in large medical centres. It has not been found constant in agreement with clinical symtomatology and consumes so much time it is impracticable. Care and attention to early clinical symptoms, be they ever so slight and trivial in nature, and guarding against any undue enthusiasm to push the treatment as soon as improvement becomes manifest, are the most practical means of controlling the administration of Vaccine Therapy.

In the matter of dosage, there is no hard and fast rule to follow. Each individual case must be judged alone. No two patients have the same degree of susceptibility and different strains of the same bacteria have different degrees of virulence. But the general rule is "The more acute the infection the smaller the dose." On the other hand chronic cases often require very large doses to produce the desired effect. After all the situ-

ation depends upon the man behind syringe.

It is the verdict of all workers in Bacterial Therapy that it is best to employ autogenous vaccines, but stock vaccines from reliable houses have produced very satisfactory results. Bacterin-Therapy is not to be considered as a cure-all but as an accessory to measures of true and tried merit —and as an aid to nature in properly selected cases by assisting in fortifying the system against infections through the productions of antibodies.

Of course, the treatment is still in the stage of development and can only be brought to perfection by a persistent and intelligent search for the truth, but the gratifying results that have been obtained at the hands of careful observers, establish beyond doubt that in Bacterial Immunization we have an important and valuable asset in medicine.

In a tabulated series of cases covering an experience of three years in which 106 various affections were treated by vaccine therapy, Dr. B. A. Thomas of Philadelphia, presents the folowing summary:

1. The diseases contraindicated for bacterin therapy are the diffused infections characterized by septicemia, pyemia and grave sapremia.

2. Those in which therapy by this agent is beneficial or curative are the superficial acute, subacute and chronic processes, especially the last two.

3. The acute cases, in which brilliant results can be uniformly expected, are those of acne vulgaris, furunculosis, carbunculosis, and subcutaneous abscesses.

4. Subacute and chronic gonorrheal and tuberculous affections are amenable to bacterial immunizations, and because of the impossibility and impracticability, often, of employing an autogenous bacterin, the reliable stock preparations should be used.

5. Certain acute gonorrheal infections can be benefited.

6. It is questionable whether tuberculin therapy should ever be employed in very acute tuberculosis. Opinion is divided as to whether or not acute miliary tuberculosis is benefitted, and death supervened as a result of tuberculin therapy in one of our cases, No. 81 of the series.

7. The mixed infections in chronic tuberculous disease afford an important prospective field for alternating bacterial inoculations and tuberculin therapy.

8. Autogenous bacterins are always to be preferred over the stock preparations, and success or failure frequently depends on this fact.

9. Although the duration of the period of greatest potency of bacterins is undetermined, the best results have been obtained when the pus has been recultured from a fresh bacterin prepared every two to four weeks.

10. It is believed that the best effects, therapeutically, particularly in chronic cases, occur when the quantity of bacterin is slowly and cautiously increased during successive inoculations, thereby, as has been thoroughly demonstrated in tuberculin therapy, avoiding hypersusceptibility or anaphylaxis.

11. Therapy by both bacterins and tuberculins can be satisfactorily executed by keen observance of the clinical symptomatology. Reliance on the opsonic index as a guide is not only necessary, but often actually conducive to erroneous conclusions, owing to its variability.

12. Bacterin therapy, by virtue of its potency to do more harm than good, when unskilfully managed, will or should probably not become a universal therapeutic measure in the hands of the general practitioner, unfamiliar with bacteriology or work in the laboratory. Ignorance and wantonness are incompatible with ambition and energy, and an otherwise meritorious therapeutic agent thus abused will ultimately fall into disrepute.

13. Bacterins and tuberculins are not "cure-alls" but when intelligently used serve as invaluable aids to Nature in fortifying the body defences, thereby accelerating convalescence, diminishing complications, and promoting cure.

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A PLEA FOR THE MORE GENERAL USE OF CHOLECYSTENTEROSTOMY IN CERTAIN CASES OF PAFCRETATIS.*

By Le Grand Guerry, M. D., Surgeon to Columbia Hospital, Columbia, S. C.

I do not pretend to be offering anything new or novel or original, but rather, out of a purely personal experience, to direct attention to a surgical procedure which, we believe, has a rational foundation and at the same time, deserves a more extended field of usefulness. We believe that the operation advocated is thoroughly consistent with the nature of the disease process, namely a chronic inflammation of the pancreas whether the etiological factor be gall-stones or infection independent of and apart from stone formation.

*Read before the Tri-State Medical Association at the meeting in Richmond, Va., February 15-17, 1910.

From what I have been able to read in books and in the current literature and have observed in actual work at very many large clinics, the operation of cholecystenterostomy in its relation to chronic interstitial pancreatitis is not as generally in use by surgeons in this country as it should be.

There are many and ample descriptions of its technique, but the deficiency lies in the failure to apply the principle of permanent drainage as often as our experience would indicate that it should be applied.

The whole proposition hinges on this point. It appears that quite a number of cases of chronic pancrea-

titis require more or less permanent drainage to effect a symptomatic and physiologic cure; that if the pancreatic inflammation has progressed to a certain stage, the operation of cholecystotomy does not afford drainage of a sufficient length of time to allow the trouble to subside; indeed, there is a point reached, in the progress of this malady, in which the pancreatitis itself is incurable, although the symptoms due to inufficient bile drainage may be relieved by operation. In other words, if the pancreatitis which started as interstitial lasts long enough, the islands of Langerhans become involved and we have the so-called inter-acini pancreatitis with its resultant diabetes.

This possibility, it appears to me, is one of the very good reasons why earlier resort should be had to permanent drainage. I suppose that at the operating table it would be impossible to state positively which of the two stages of the disease was present. It is easy to understand when we consider the small size, comparatively, of the bile channels, that bile is secreted under very low blood pressure and also how slight is the pressure behind to force it on to the duodenum, and that very slight obtruction at the head of the pancreas would be sufficient to cause its damming back and consequent absorption.

Gall-stones are the most important single cause of pancreatitis, furnishing the causative agent in about two-thirds of the cases, the remaining third being due to infection independent of stone formation originating either in the stomach, duodenum, or gall-bladder; the direct mechanical cause being closure of the ampulla of Vate."

I will briefly relate case which is typical of quite a number to serve as a concrete illustration. Mr. M— aged 58, married; several years ago had an attack of pain in the gall-bladder region with very slight jaundice, pain occasionally radiating under right shoulder, slight fever, indigestion, etc. These attacks would occur at frequent intervals, but there was a gradual weakening and loss of flesh, no sugar in urine. Diagnosis gall-stone or pancreatitis (chronic) or both. At the operation a slightly distended gall-bladder was full of the characeristic ropy, tarry, black bile and well marked colon bacilli odor to it. The pancreatic head was markedly enlarged. Operation consisted in cholecystotomy after the common ducts had been thoroughly explored and a probe passed into the duodendum to insure the patency of choledochus; drainage was continued for three months, and during this time he not only gained twenty pounds in weight, but was completely restored to health. This is a sentence from a letter received three months after the wound had been closed: " Dear Doctor: I have just had another attack very much worse than any before my operation—what shall I do?" On my advice he returned to the hospital, at which time cholecystenterostomy was done, and with the result that he had been permanently relieved from all of his symptoms and is now in perfect health. I notice also that in my list of secondary cholecystenterostomies there are included cases previously operated on by other surgeons of undoubted standing.

The case above reported is simply one out of many. In fact, in my own work, there have been such a proportion of cases of interstitial pan-

creatitis that have failed to remain perfectly well after simple cholecystotomy, that we feel it safer and more conservative in the presence of jaundice, a dilated and distended gall-bladder and common duct, to institute permanent drainage at the primary operation. I heard a distinguised surgeon say, not very long ago, while operating on a case of this sort, "If the patient was markedly jaundiced he would do at once permanent drainage, but he stitched the gall-bladder to the fascia of the rectus in order that it could be more readily opened should recurrence take place." This seems to me to be begging the question and emphasizes the point we are contending for—a more general use of cholecystenterostomy in certain cases of pancreatitis.

We think it most important to try and determine at the primary operation which cases need permanent drainage and which do not, and not to wait for a recurrence of symptoms to point to us the error of our way, for it is our opinion that this malady is not only a more frequent one, but much more important than is the general belief.

The following from Mayo Robson is very much to the point, "a simple drainage of the gall-bladder by cholecystotomy is frequently unsatisfactory and cannot be relied on in well marked cases of obstruction as drainage of the bile passage is not sufficiently long continued. This applies especially to the cases in which the interstitial pancreatitis has persisted for some length of time, in which cases, although a cholecystotomy may lead to a disappearance of the jaundice, and the digestive symptoms may be alleivated the metabolic signs found in the urine many months or even years subsequently show that recovery has only been partial."

To my mind it is most important to draw a distinction between chronic pancreatitis due to gall-stones and chronic pancreatitis due to infection independent of and apart from the presence of stones. In the first case, simple removal of the stones and temporary drainage of the gall-bladder gives permanent relief, because we remove the cause of the disease. In the other case, however, the trouble lies outside of and independent of stone formation and these cases, within the bounds of our experience at least , are much more likely to require permanent drainage to effect a cure.

"I am impressed with the fact that chronic pancreatitis is not only a much more frequent malady than has been supposed, but a more important one. In looking back over considerable experience in surgery of the gall-bladder and bile tract, I find that a number of cases that have failed to make a good recovery, failed because of pancreatic complications. It is certain that a much larger proportion of cases, especially those with a distended gall-bladder and dilated common duct with or without stones, should be treated by a cholecystenterostomy than has been the practice among American surgeons." (Mayo.)

We submit, then, our belief based on our own individual work, that when operating on cases of chronic pancreatitis, especially that variety of the disease independent of stone formation, in the presence of even very slight jaundice and a dilated and distended gall-bladder and choledochus with a definite enlargement of the pancreatic head, that the applica-

tion of the principle of permanent drainage not only has its foundation in rational conception of the pathology of the disease process, but is entitled to a very much more extended field of usefulness.

(Reprint from the Southern Medical Journal, January, 1910.)

THE RELIGIOUS PRESS AND QUACKERY*

By Dr. Rolfe E. Hughes, Laurens, S. C.

Mr. President and Gentlemen:

The achievement of modern surgery,, the revelations of the microscope or the skill of the internist are today upon a footing never before dreamed of, as far back as the memory of man goes, and with this naturally comes a tendency towards the alluring, strictly scientific part of our work. So deeply are the majority of us absorbed in scientific research and its rapid advances that we are overlooking and ignoring some insidious but dangerous influences—very far reaching in their effect.

Therefore, when offering a subject not scientific, one would feel like apologizing to a body like this, if he did not know his theme a timely one; or could, not with the most consistent candor claim that he thought The Religious Press and Quackery, just as important as our war against the White Plague, Pellagra, or Hookworm; but the reading of a paper denouncing the Religious press for its support of Quackery will doubtless prompt the usual comment from the public to the effect that advice is cheap, and, that "Know when to speak, for many times it brings Danger to give the best advice to Kings."

We shrink from making attacks of this nature, for the laity is already questioning the frequent and rather fulsome efforts on our part to advise and enlighten, claiming that those of us least charitably inclined are the ring leaders in howling our high aims and love of humanity—until the very howling suggests the shrewd misgivings of the Queen in Hamlet, "The Lady doth protest too much, me thinks." Therefore, any effort on our part to warn them brings up the invariable debate as to the ostensible or real motives that inspire any of our campaigns against Charlatanism, be it Christian Science, glass vendors, cancer quacks, dope drugs, or any of these things, which they would say conflicted with our mundane interest.

So much are these exposures doubted, that we, as a class, are almost persuaded to let the whole business beautifully alone. Rather are we prompted to allow them to plaster on cancer paste until they looked like a Figi Islander, fill their ears so full of artificial drum heads that they can take a wireless from the lost Schooner Hesperus, pack a ton of glass, made of pebbles from Jordan's happy shore, before each eye, or saturate their anatomy so full of narcotics

*Read before the Tri-State Medical Association at the meeting in Richmond, Va., February 15-17, 1910.

that their breathwill sprout the poppy plants.

No use to say a word—they don't believe it, but, when the Managing Editors or religious papers further teh cause of such imposters, tis right that we sound a warning note for, possibly, a rap on his head would arouse a consciousness of the wrong he is doing. He knows better. He is a teacher, his sheet, the official organ of some denomination, should stand for truth, at least. Its influence is great. Its weekly visit is looked forward to with pleasure in every religious and well regulated home. Its stories are read to the children and enjoyed by older people. Eighty-five per cent. of its readers are not discriminating. They believe every word in it, and go on through life from childhood with undying faith pinned to their church paper, and would as soon doubt their mother or their clergyman.

Shame on such editors that they allow their columns to teem with fraudulent and dangerous ads. It's a disgrace on the age.

One other point. The people at large have never grasped the idea that true physicians cannot and do not advertise. They only announce, they never guarantee cures, only quacks can. True men of science often labor without glory, money or recognition. Today, Robert Koch, eighty five years old, is in the wilds of India, and has been for years, cut off from pleasure, comfort and home. There he will probably soon die, leaving us the heritage of a well spent and useful life, as well as many facts with which we and the future generations can combat bubonic plague. Not satisfied with what he has already accomplished, he makes this sacrifice for the world.

Think of Koch putting an ad. in the "Spiritual Monitor," guaranteeing any cure, or even proclaiming himself superior to his colleagues.

But, of all the quacks who advertise in the papers, the cancer man is possibly the worst, and it is to him we will pay our respects. Defined, he is an excresence on the face of the earth, so irritating to that particular spot on the mudane's face, that when he first grew out, the ground heaved and belched forth this spurious form of protoplasm, made of the swindle cell variety. His course through life was nil, having tried every thing from water boy to tramp, he reads Barnum's Autobiography—a large book, containing but two statements. One is that "the way to fortune is through printer's ink," the other—"that every other man is a fool." Assuming these facts, he dons good clothes, cultivates doctory mannerisms, and, (as a poser, he is an artist) gets his presence and wares advertised in the "Salvation Eye-opener," there states that he has taken course after course in the Icatchem Sarcomatus Clinic of Ep-the-burg, when, in reality, he only graduated at the University of hard knocks. And he is true to his Alma Mater, judging by the way he hits the public, as he goes from village to town, town to city, stealing all he can, for, of course everything he meets from the tot's ganular conjunctivitis to grandma's false teeth is cancerous.

All is easy. Dr. Barnum was right, The religious press backing him, the road to fortune is clear. This picture is not over drawn. Note the following from the Journal of the

A. M. A., Feb. 20th, 1909.

"Rupert Wells, M. D., the "Cancer cure," faker of St. Louis, has been denied the use of the United States Mails by the Post Office Department, which a few days ago, issued a fraud order against this notorious quack. Samuel Hopkins Adams, in his Great American Fraud series, paid his respects to Wells—whose real name, according to the postoffice officials, is Dennis Dupuis—and called attention to the fact that Wells was one of the first to recognize the commercial possibilities of the public's interest in radium as an asset to quackery.

Advertising Myths.

To furnish good advertising "copy" Wells invented a mythical "Postgraduate College of Electrotherapeutics of St. Louis," and forthwith applied himself to an equally mythical chair of Radiotheraphy. His hypothetical professorship in a non-existant college was, like his fictitious name, of use only for business purposes. Says Mr. Adams:

"Rupert Wells, M. D., is very religious—in his advertisements. He loves the church papers. The weeklies with smug and pious editorials, and no conscience whatever in the matter of paid advertising, are his green pastures. He is a home and fireside cuddler, is Rupert. He is, also, a grand-and-lofty liar of the most complete and soul-satisfying description. You can read whole pages of his "literature" and not come on one single statement tainted with truth."

How Wells Caught His Victims.

Of the "cure" itself and its methods of exploitation, the official report from the Post Office Department says:

"Dupuis causes to be published extensively throughout the country advertisements over the name of Dr. Rupert Wells, giving his address as St. Louis, Missouri, inviting those persons who may believe they are afflicted to write to him for free information about his treatment for the cure of that disease, and in those advertisements makes such statements as these:

"I can cure cancer at home without pain, plaster or operation. I have discovered a new and seemingly unfailing remedy for the deadly cancer. I have made some most astonishing cures. My marvelous radiotized fluid did it. No matter what your condition may be, do not hesitate to write."

He charges $15.00 per month, his solicitations for the purchase of the treatment are made absolutely without inquiry by the advertiser as to the condition of the correspondent, or whether he is actually afflicted with a cancer, or in what form or location the disease may be present, but the correspondent is solicited but to take the treatment simply on his own assumption that he may be suffering from the "disease."

Posibilities of Hydrant Water.

The "marvelous radiotized fluid" which formed "Dr. Wells' " stock in trade was known as "Radol (Wells)," and came in two forms, for external and for internal use, respectively. Mr. Adams tells us that the analysis for him of this "radium impregnated fluid" disclosed the fact that it contained "exactly as much radum as dish water does." The investigation of the Postoffice authorities confirm the earlier analysis. The investigations disclosed that the fluid for internal use consisted essentially

of a weak, acidulated solution of quinin sulphate in water and alcohol in the proportion of about 1 1-4 grains quinin to the ounce of the fluid solution and about seven per cent. alcohol. The fluid for external use was found to be a watery solution, containing about ten per cent. of glycerine and a small quantity of inorganic salts. Both solutions were tested for radioactivity. No such activity was detected in an amount appreciably greater than is to be commonly found in ordinary hydrant water."

"The size of this business is indicated by the report of the postmaster that the first-class mail the week of his report averaged about 70 pieces a day; also, the statement made at the hearing for respondent that he sent out an average of about 25 treatments a day, some of which he stated were free. According to this statement, and counting only week days, about 7,800 treatments were sent out in 1908. That year the respondent stated that he sent out over 1,000 free treatments. He was then paid for 6,500 or 7,000 treatments. The price varied from $2.50 to $15.-00—but if the average were $10.00, he was paid in 1908 about $70,000.-00."

Conclusions: Wells' support was by the *Religious papers.* Hundreds of similar quacks are being thus advertised daily. In round numbers. $100,000,000 is consumed annually by the people of the United States in fake nostrums and quacks. Of the Religious papers, representing nearly as many denominations examined since this question came up, not one was free of the charge. Are not they more to be censured than the quack? For in Wells' case, his stuff was, at least, inocuous, while these papers are advertising drugs absolutely harmful and are robbing, lying, and wrecking lives. Those wrecked by their cocaine, opium, alcohol and chloral that cannot be accommodated by the gallows, penitentiary, and insane asylum, can usually get standing room at Keely's; and, as for the children of such patients now and those yet to be born, are the inherited neuroses from dipsomnia, melancholia and hysteria to raving maniacs, suicide, epilepsy and death. Who is responsible?

The first great harm done by the advertising quack is in calling a person's attention to themselves by the ingeniously worded and detailed array of symptons, catchy and persuading to the neurotic. Fear of the malady advertised is the outcome, and with fear comes a weakening of the will and coincidentally a perversion of many functions. Secretions are stagnated or turned loose in a torrent. The patient becomes introspective, begins taking the various nostrums, and those not killed by the dope die of fear. Calvin, Knox and Napoleon, are all prominent examples of strong minds wrecked by fear, disappointment or dread. Many intellects annually are going, the result of fear started by an ingenious patent ad.

Christian Science has a salutary and redeeming feature, and that is by making a patient forget he is sick, that disease and death don't exist—no fear of trouble here and assured of eternal bliss above, therefore, no fear, no nerve tension, they become self reliant and are considered good risks by insurance companies.

If it is true that nature intended every animal to live to an age approximating five times the number of years, which it took to reach its bodily maturity, then man reaching his maximum strength and height at twenty should be one hundred. But the fear of disease is started often by Patent ads—the use of the nostrum as advocated by the church paper, is sufficient to start many on the long journey.

As to the Quacks, we must have some admiration for their gall and gulling, for the reading public, pity and prayer, but for the Religious press gentlemen, they stand as indicted. "When my love swears she is made of truth, I do believe her, though I know she lies."

THE DUTY OF THE PHYSICIAN TO THE PUBLIC.*

By C. F. Williams, M. D.
Secretary South Carolina State Board of Health and State Health Officer.

Obviously enough it must be seen that the duty of the physician to the public is not restricted to the field of medicine, particularly to the field of preventive medicine, but in my brief discussion of the subject my remarks shall be confined entirely to the latter field.

Never in the history of our country has there been so much activity in the field of public health and preventive medicine as at the present time. Not only is this true in our country but throughout the civilized world. Everywhere we hear the clarion cry, conserve the public health. Why is this? In a general way the answer involves two reasons. First from the advance made in medical science in the past quarter of a century which gives us a knowledge of the cause and mode of transmission of certain diseases; a knowledge which carries with it, as Hill has said "a true conception of the study of public hygiene as the study not of fancies or fads but of determinable facts, from which tentative generalization may be made, checked, revised, polished, reviewed, and finally established as principles for application in new instances;" wholly differing from the older conception, though recent enough to be recalled by every one present, 'which held that ill health, and especially the infections are due to and spread by certain vague factors, as "peculiar weather," "ærial convections," "sewer gas," "excavation of the soil" and even "general unsanitary conditions."

Second, because we are beginning to realize the great economic waste from preventable diseases, the needless misery, suffering and unhappiness thereby engendered; the deterioration of the race through their influence and its far reaching effects upon us as a state and nation.

As has been pointed out by Prof. Norton of Yale University, "there

*Read before the Tri-State Medical Association at the meeting in Richmond, Va., February 15-17, 1910.

are four great wastes today, the more lamentable, because they are unnecessary. They are preventable death, preventable sickness, preventable conditions of low physical and mental efficiency, and preventable ignorance. They fall like the shades of night over the whole human race, blotting out its fairest years of happiness. The facts are cold and bare 1,500,000 persons must die in the United States during the next twelve months, equivalent to 4,200,000 will be constantly sick; over 5,000,000 homes consisting of 25,000,000 persons will be made more or less wretched by mortality and morbidity." The figures are alarming and should arouse each of us to our responsibilities and awaken in us a keen desire to do our full duty to the public in preventing diseases which can be prevented, in relieving the burden of misery, suffering and unhappiness, in checking this great waste and in preventing deterioration in our race.

Frequently we hear the question asked, what is the physician's duty to the public? To answer this question fairly, there can be only one answer; namely, the same as that of any other good citizen. The duty of the physician is simply that of a citizen, one who has had exceptional opportunity for studying and understanding health problems, and who on account of this special knowledge is qualified to render special service to the community. But as a citizen we must fairly see that he has no greater duty than any other trained capable man who ought to render the community service along the lines of his special training and ability. A good workman or a good business man, or a good lawyer outside of his professional life, may reasonably be expected to give to the community as a whole something from his special training and ability. Hence, the physician who should know more about health matters than any one else in the community should be expected as a good citizen to help the community conserve its health.

It cannot be denied that the physician's professional knowledge and responsibilities to his patients carry with it responsibilty to the community as well. As Dr. Richard C. Cabot has said, "it would seem at the present time that the majority of men are governed by the respectable old individualistic idea, that their whole duty in the practice of medicine is to the patient, and that his interests are always to be paramount. Those who fixed in our code of ethics this eighteenth-century individualism thought they were doing a very noble thing to make it clear that the doctor was not to serve his own interests, but rather those of the patient when any conflict arose. It did not occur to them that there was a third party in the transaction—namely, the general public and its interests." But now under the new order of things the awakened activity of the general public in the field of public health and preventative medicine, "there seems to have come upon the medical profession a dawning sense that they are the servants not of their patients primarily, but of the community first, last and all the time, and of their patients only in so far as their interests are identical with those of the community." It is for the patients interest to keep it dark whenever we find an inconvenient case of infectious disease, but obviously enough it is for the public interest that we

shall do nothing of the kind. Gradually physicians are beginning to realize this, and to educate their patients up to the point of reporting the cases which are likely to leak out anyway; cases such as diptheria, scarlet fever and small pox. When the matter can be decently hushed up, it is still the practice of a great many physicians to be blind to their public duties, and to serve private masters, namely, their patients. Still more strongly is this the case when we come to those most dangerous and contagious of all common diseases,gonorrhea and syphilis. With the very mention of these diseases the physician's lips are sealed, and still, gentlemen, in our battle to prevent deterioration of the human race to preserve our natural vigor and to check a great economic waste, these diseases are to be reckoned as our greatest foe. No where in the field of preventive medicine has the physician so distinct and plain a duty. The very nature of this class of disease, their shameful character and the knowledge of their source, is unto itself a fortress behind the walls of which only the physician in his capacity as medical adviser is allowed to pass. It is therefore evident that in the beginning of any propaganda looking to the suppression and prevention of these diseases a great duty and responsibility devolves upon the physician in his capacity as sanitarian and guardian of the public health. In safeguarding the public from the spread of these diseases the physician becomes the protector of the wife and mother and the preserver of future citizens to the state. To discharge this duty faithfully realizes the highest ideal in preventive medicine and renders a great service to the State and nation.

There can be no question whatever that a surprising and discouraging number of the medical profession have not realized their duty to the public in the matter of preventing disease, even from the standpoint of a good citizen; and that those who have a true conception of their duty and responsibility are frightfully lax in giving directions which should be followed by patients having preventable diseases, and by the families of such patients. Not alone is he lax in giving the first information, but there is a greater laxity in failing to persistently, continuously and tactfully follow up his instructions to insure sympathetic and intelligent effort on the part of the patient and family.

How frequently, we as health officers find, when called upon to investigate epidemics, that the outbreak is due either to the physician not giving proper instructions on the appearance of the disease, or to his not being more insistent that his instructions be complied with by the patient and family. This is failure to render a professional duty to the patient and a vital social duty to the community. It can be fairly charged that an altogether inexcusable proportion of the medical fraternity is frequently, if not usually, lax in this respect.

From the standpoint of a physician's responsibility as a citizen, it may be also urged that he might discharge that responsibility to a greater degree by being more alert in taking advantage of opportunities for popular education. It seems to me that the physician, as a citizen, ought to cultivate the habit of presenting scientific truths practically applied in a form to be understood by the average man. It would seem also

that the physician should be more prompt and more thorough in combatting the poplar ignorance which is betrayed on every hand as to the cause and mode of transmission of disease; and especially should he do this at times of crisis for example, in connection with the proposal to establish a tuberculosis sanitorium. During the last year there has been a number of instances when a sanitorium or dispensary has been bitterly opposed. In nearly every case the greater proportion of the medical profession, including the most influential members of it, have remained persistently silent, even when there was every reason for a frank, open statement of opinion or interpretation of scientific authorities upon the subject.

I am not one of those who believe that the physician is called upon to spend his life in promoting preventive medicine. Certainly this is not to be demanded fairly until we revise the basis of professional remuneration. Some of these days we may betray the existence of good sense equal to that of the Chinese, who are said to pay their physicians for preventing diseases rather than for curing them. We may believe that the time will come when physicians to be leaders, will encourage regular and frequent examinations of the entire family. This will mean life insurance examinations, real, practical life insurance, and the physician will have his part in conducting such examinations and in acting in an advisory capacity in order to direct those of his clientele in the best direction suggested by the result of his examination.

But until this day comes let us be true to our citizenship, professionally law-abiding, and above all, scrupulously faithful in remembering the larger interests of the public against the ignorance of the patient and the family. In other words, the physician should be absolutely faithful in the reporting of all reportable diseases, in giving proper instructions to his patient and the members of the family, and in faithfully seeking to secure observance of his instructions.

Journal of the South Carolina Medical Association.

FLORENCE, S. C.

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EDITORIALS.

THE LAURENS MEETING.

The Sixty-Second Annual Meeting of the South Carolina Medical Association has passed into history and left a record for succeeding meetings to endeavor to emulate. Not only was the attendance the largest in the history of the Association, but the clean cut and methodical handling of the various meetings, and of the business at these meetings set a record which will be hard to surpass. For probably the first time since this Association was formed the House of Delegates transacted all of its business on the first day of its meeting and the two succeeding days were left wholly free for the scientific sessions. Again, the whole of the scientific programme was completed and the general meeting adjourned by one p. m. on Thursday. It is to be regretted that so few of the visiting physicians could stay over for the smoker which the Laurens County Society had arranged for Thursday night.

Many matters of importance came up before the Council and the House of Delegates and were disposed of. Among these probably the most important and far-reaching was the resolution proposed by Dr. C. W. Kollock, and passed unanimously by the House. This motion to change the Constitution provided that the officers of the Association be elected by the House of Delegates on the day before the general meeting and that as much business as possible be transacted before the general meeting in order to prevent interruptions of the meeting by business affairs. This change necessitated several minor changes in the By-laws, all of which were provided for in the resolution offered by Dr. Kollock. There was some discussion on the motion, but it passed without a dissenting voice and an election was immediately ordered. Dr. J. H. McIntosh of Columbia was elected President to succeed Dr. Dawson; Dr. J. W. Jervey of Greenville, Dr. R. B. Epting of Greenwood, and Dr. R. E. Hughes of

Laurens, Vice-Presidents; Dr. E. A. Hines of Seneca, Secretary to succeed Dr. Walter Cheyne; Dr. C. P. Aimar, Treasurer; and Dr. J. L. Dawson and E. A. Hines, Delegates to the A. M. A. At a meeting of the Council Monday night Dr. J. C. Sosnowski was chosen to succeed Dr. F. H. McLeod as Editor of the State Journal.

To the profession and to the people of Laurens the thanks of the Association are due. Their hospitality was boundless and their good will great. Not a hitch marred the proceedings, not a necessity which could be provided was lacking. Sufficient room space for the various meetings, general and committee, was given in easy reach of the hotels and of each other and entertainment was free and lavish. And at the same time each and every member of the association, while made to feel royally welcome, was not forced to feel hampered in his actions—the height of hospitality.

A brief resume of the proceedings of the House of Delegates will be found on another page and the full proceedings will be published in the May issue of the Journal.

THE TWO PRESIDENTS.

To Dr. J. L. Dawson, the retiring President and to Dr. J. H. McIntosh, the new President, the congratulations and best wishes of the Association are extended. Both are able, earnest and upright members of the profession and both well deserving of the honor shown them. It is a pleasure to feel that such men belong to the medical profession of this State and that they have been chosen as representatives of the men worthy of the highest honors we can offer. To Dr. Dawson the thanks of the Association are due for the business-like and dignified manner in which he conducted the proceedings throughout the whole meeting, creating a celerity which was remarked by all present.

THE PRESIDENT'S ADDRESS.

Dr. Dawson in his address left the beaten track followed by men the Country over in making such addresses, and struck straight at the root of many of the faults of medical education of today. His address is given in full in this Journal and we commend its perusal to every one who has studied, is studying, or expects to study medicine. The truths he cites are, alas, too true; and the profession owes to itself and to its traditions that the standard be raised. In every community the doctor should be the foremost man, the teacher, as his name implies, the man of high ideals and high thought, the man who is the friend of all the philosophers of the ages, the man of wisdom. He should not be the mere medical machine who knows little of and cares less for psychology and history, music and art, literature and science; but should be a man who can understand and appreciate and apply the rules of modern science and psychology, who can lose his cares and worries in the companionship of the world's best minds, who can appreciate the finer things in life. In our profession we see much that is sordid, much that is petty, much that is mean, but through it all much that is good, and it is our privilege and duty to so cultivate ourselves that we may be able to see and develop the best in ourselves and in

others. As Dr. Dawson says, we become polished by attrition with our betters, and we are able to do better work by developing ourselves in all directions. Lew Wallace in Ben Hur, pictures a galley slave who percieved the ill effects of one-sided development and by request was shifted from side to side of the ship so as to develop both sides equally. As Ben Hur did, so let us do, and develop ourselves systematically.

As to ideals—the physician without ideals is truly to be pitied—condemned to work day and night, to see suffering, to hear most pitiful tales, to become the repository of all the sorrows of the world, he is a most pitiful object unless he can save himself by that high vision which can see,

> "The Master's hand
> Held forth to life from out the hideous soil the budding fronds,
> Whose purity and whose beauty shall o'er shadow and conceal,
> The reeking filth, from whence they sprung."

God pity the man without ideals, for he needs it, and God help the community who has for its physician a man "out for the coin" alone, for they need it.

DR. CHEYNE AND DR. HINES.

Dr. Walter Cheyne, of Sumter, the retiring Secretary of the Association takes with him the best wishes of the profession. He has been a most diligent and faithful worker for the unification and uplift of the State and County organization and has had the pleasure of seeing the membership of the State Association nearly triple itself during his incumbency. He has seen the various medical bodies of this State become a single cohesive unit, largely through his effort and has left for his successor an admirable record of achievement to be emulated. We wish him God speed.

Dr. Hines, of Seneca, Dr. Cheyne's successor, is one of the few men in the State who can fill the place vacated by his predecessor and not suffer by comparison. We shall look forward to his advancing the cause so ably championed by Dr. Cheyne, and carrying the banner of the South Carolina Medical Association to the very front of the ranks of Medical Associations. He is amply able to do this and in addition has the will to do so.

AN EDITORIAL BOW.

With this issue the Journal passes into the hands of a new Editor, and I wish for the moment to drop the impersonal "we" and speak straight to you as man to man. In the life of the State Association the Journal means much and on you depends in large manner its success or failure, therefore I earnestly request that you give me your support in making a success of this your paper. What makes a State Journal of value to the members of the State Association is more the items of news of medical affairs and men in the the State than the papers published in the Journal, though those be of inestimable value. I ask you therefore to keep the Editor posted on all that happens which is of interest to medical men generally—the various items of local interest are often of general interest as well. Send papers read and accounts of meetings of societies and of disucssions; of medical and hygienic problems; send accounts of personal observations and

of rare and curious diseases or of epidemics, and of anything else of interest. And take an interest in and read the Journal. If you have criticisms to make, I ask that you make them to me first and allow me the chance of correcting any errors I may and probably shall make. And before subjecting me to blame please put yourself in my place and try to figure out my viewpoint as well as your own and then let me know if you still think I am wrong, and why you think so. This is only fair to both of us, and I rely on your sense of fair play. I ask your help as man to man to make a success of this Journal. And this means *you*.

J. C. Sosnowski.

SUMMARY OF TRANSACTIONS OF THE HOUSE OF DELEGATES IN LAURENS, APRIL 19, 1910.

The House of Delegates was called to order at 2 P. M. Dr. Dawson in the chair, but was adjourned for an hour, as no quorum was present at that time, and reconvened at 3 P. M.

The President appointed a Committee on Credentials as follows: Drs. J. T. Taylor, W. J. Burdell and Walter Cheyne.

Reports were heard from: The Secretary, the Treasurer, Committee on Scientific Work, Committee on Public Policy and Legislation, State Board of Health, State Board of Medical Examiners, the Councilors, the Delegates to the American Medical Association, the Committee on Necrology, and the Tuberculosis Committee. These reports were adopted and ordered spread upon the minutes.

Under the head of New Business: Dr. C. W. Kollock, of Charleston, after a brief discussion of the subject moved the following changes in the Constitution and By-laws: That the time for the election of officers be changed to the day before the Scientific Session, and that the hour for the meeting of the House of Delegates be changed to 10 A. M. of that day, instead of 2 P. M. in order that all business might be transacted on the first day, and the following two days be divided uninterruptedly to the scientific session. After some discussion the motion was put and carried unanimously. As there was no dissenting vote, this change in the Constitution took immediate effect and the election of officers was entered upon.

The officers elected for the ensuring year are as follows:

President—Dr. J. H. McIntosh, of Columbia; Vice Presidents—Dr. J. W. Jervey, of Greenville; Dr. R. P. Epting, of Greenwood; Dr. R. E. Hughes, of Laurens. Secretary—Dr. E. A. Hines, of Seneca. Treasurer—Dr. C. P. Aimar, of Charleston. Delegates to A. M. A.—Dr. J. L. Dawson, of Charleston; Dr. E. A. Hines, of Seneca.

On the Board of Health the following changes were reported: Dr. Wm. Egleston, of Hartsville to fill the place left vacant by the death of Dr. Evans, of Florence, and Dr. E. A. Hines to fill the place vacated by the resignation of Dr. Adam Hayne. The Board of Medical Examiners and the Council were re-elected.

The House of Delegates was then adjourned till 8:30 P. M.

At 8.30 P. M. the delegates reconvened in the Armory and the various committees were appointed. The personnel of these will appear in a subsequent issue of the Journal. At the night session Dr. S. C. Baker, of Sumter, Chairman of the Committee on the Sims Memorial, made a report of what had been done in connection wtih the erection of a statue to Dr. Marion Sims. He said that a suitable statue could be furnished by a famous sculptor for the sum of $9,000, if the order shall be placed with him this year, as the sculptor is to be in Paris and within easy access to the requisite models and studio room. After a year the sculptor will return to the United States and would then charge $10,000 for the same work. Various methods were suggested for the raising of the necessary funds and it was finally decided that the State Legislature be requested to donate one half the necessary amount, this donation to be contingent on the other half being raised by the medical profession. A full report of the discussion and action of the Delegates will appear later.

Upon the motion of Dr. Burdell, of Lugoff, a resolution was adopted instructing the Secretary to send the greetings of the Association to Dr. A. A. Moore, of Camden, S. C. A report was read by Dr. Rosa L. Gantt embracing resolutions adopted by the women members of the American Medical Association. This report was summed up in the form of a motion put by Dr. C. W. Kollock to the effect that the various Societies through their presidents, take up the matter of delivering addresses throughout the State on the prevention of the various preventable diseases among children.

The Committees appointed to consider the various reports read during the afternoon were reported and their reports adopted and ordered spread upon the minutes.

The invitation of the Charleston County Society was accepted, and Charleston appointed as the next meeting place on the third Wednesday of April 1911.

The meeting then adjourned sine die.

SOCIETY REPORTS.

The Journal desires to have a report from each Society, each month. Space will be reserved for these reports and when no reports come in a note will be made to that effect. Even if the Society in any county holds no meetings for one, two or even three months, matters of interest to the profession are constantly occurring and should be reported to the Journal. We hope each county Secretary will take a pride in seeing that his Society has a record of the month in every issue of the Journal; and we hope that we will never have to print in any subsequent issue the words "no report" after the name of any society. (Ed.)

Abbeville—No report.

Anderson—No report.
Aiken—No report.
Bamberg—No report.
Barnwell—No society.
Beaufort—No report.
Charleston—No report.
Cherokee—No report.
Chester—No report.
Colleton—No report.
Clarendon—No report
Darlington—
Edgefield—No report.
Fairfield—No report.
Florence—No report.
Georgetown—No report.
Greenville—No report.
Greenwood—No report.
Hampton—No report.
Horry—No report.
Kershaw—No report.
Laurens—No report.
Lee—No report.
Lexington—No report.
Marion—No report.
Marlboro—No report.
Newberry—No report.
Oconee—No report.
Orangeburg, Calhoun—No report
Pickens—No report.
Columbia, Richland—No report.
Saluda—No report.
Spartanburg—No report
Sumter—No report
Union—No report.
Williamsburg—No report
York—No report.

The Darlington County Medical Society held its first meeting for the year at the Darlington Hotel, February 7th, at eight thirty P. M.

After supper the meeting was called to order with twelve members present.

The minutes of the last meeting were read and adopted.

There were several very interesting Clinical cases reported.

The subject for general discussion, "Tuberculosis Medical" was discussed at length. The Society decided to do some active work in the way of educating the public in regard to this dreadful disease. The President and Secretary were appointed as a Committee to formulate plans to begin this work especially in the public schools.

A copy of the resolutions adopted by the South Carolina Medical Society was read, discussed and adopted by this Society.

Our delegates elected to the State Medical Association are Dr. C. C. Hill and Dr. J. T. Coggeshall.

Meeting adjourned to meet again in April.

The Darlington County Medical Society meets regularly every three months, with from ten to fifteen of the twenty-five members present. At present the Society is in a flourish-condition with only a few men on the outside, and we hope to have them all soon. Our members enjoy the "Journal" of the South Carolina Medical Association, which is always a welcome visitor.

J. C. Lawson,
Secretary D. C. M. S.

CURRENT MEDICAL LITERATURE.

STANDARDS IN MEDICAL EDUCATION AS RELATED TO STANDARDS IN GENERAL EDUCATION.

Hon. Elmer Ellsworth Brown, Washington, D. C., (Journal A. M. A. April 23, 1910.) concludes as fol lows:

Medical education must be grounded in the general system of education. It will come to its best only when it can rest on a sound and ample system of secondary schools and be backed against the scientific and literary greatness of a true university. Our educational leaders on the other hand, will be nerved up to their best endeavors when they see clearly the connection between their scholastic undertakings and those technical and professional pursuits through which education comes into its most direct service of the public good.

The combination of these related interests broadens out into the widest reaches of practical patriotism. Education and medicine are to be fellow-servants in much of the great work of the coming civilization. Together they are to increase our prestige and influence abroad as well as our happiness at home. In more ways than have yet been worked out they are to be a strong support of our federal government in assuring to this nation its rightful place and influence among the nations of the earth. That the representatives of these two great national interests, many of whom are educators and physicians, both in one—that they shall together see both sides of this problem with which the Council on Medical Education is dealing, and shall together work for the great ends which you have proposed, is a consummation, not too great to be hoped for, but one to be furthered by every means within our power.

H. P. Cole and G. J. Winthrop, of Mobile, Ala. (Journal A. M. A. April 23, 1910.) after citing Authorities and Cases, read the following:

CONCLUSIONS.

1. In certain severe cases of pellagra resisting all forms of medical treatment, transfusion has been followed by recovery with no relapse.

2. The patients recovering showed marked improvemtnt from the first; in the fatal cases there was no benefit from transfusion.

3. Transfusion is of undoubted value in certain severe and apparently hopeless cases, but without a thorough knowledge of the technic of transfusion and without a careful selection of the cases and donors it will be brought into an undeserved ill repute.

204 Conti Street.

Creighton Wellman & Edward von Adelang of Oakland, Cal., (Jou. A. M. A. April 23rd) report a case of filarial Hematochyluria treated

after the method of Wherry and McDill with apparent recovery. They quote the following from Wherry and McDill's report of these cases:

She (the patient) was given 80 to 90 grains of quinin sulphate during forty-eight hours, followed by x-ray exposures of five minutes, with the tube 18 inches away. Quinin having been administered daily, these exposures (over the lumber region) were performed at 2 to 3 p. m. on September 8, 10, 11, 12, 14, 16, 17, 18, and again after cinchonizing as before at 9 p. m. on September 29 and 30. On October 2 the skin over the chest and abdomen became reddened and hot. A chill and left pleurisy developed. Paracentesis produced about 600 c. c. straw-colored fluid on October 8. Skin scarlet all over body. All this time the urine remained thick and bloody, but on October 10 became normal and has remained so. The temperature throughout, except during the attack of pleurisy, remained about normal, 97 to 99.4 in the morning and 98 to 99.4 in the evening. Until the pleuritic attack the patient had gained 25 per cent. in weight and general appearance, and although an evening temperature of 1 to 3 F. persisted until October 22, she regained her strength so rapidly that on October 29 and 30 the x-ray was again applied for fifteen minutes, after quinin, with the bulb five inches away. Although the patient has been at home and walking about for the last two months her chluria has not returned. The living embryos still persist in her blood.

About four years later the authors report again as follows on the case:

The hematochyluria cleared up on October 10, 1904. Two months later filarial embryos were still present in the peripheral blood, but repeated examinations since, made about once a year, have failed to reveal the embryos. The last examination was made one year ago, 1908. The patient is now in Nagasaki and said to be in good health.

Chas. V. Cuerington, Richmond, Va., (Charlotte Med. Journal, April, 1910, advocates vasectom for certain types of criminals and gives the details of the simple operation. He gives the text of the bill now pending before the Virginia Legislature as follows:

SENATE BILL NO 298.

To Prevent Procreation by Confirmed Criminals, Idiots, Imbeciles and Rapists.

Whereas heredity plays a most important part in the transmission of crime, idiocy and imbecility; therefore

Be it enacted by the General Assembly of Virginia, That on and after the passage of this act it shall be compulsory for each and every institution in the State, entrusted with the care of criminals, idiots and imbeciles, to appoint upon its staff, in addition to the regular institutional physician, one skilled surgeon of recognized ability, and one alienist of recognized ability, also the secretary of the State Board of Charities and Corrections, whose duties it shall be, in conjunction with the chief physician of the institution, to examine the mental and physical condition of such inmates as are recommended by the institutional physician and board of managers of said

institutions. If, in the judgment of this committee of experts and the board of managers, procreation by any of said inmates is inadvisable by reason of said inmate being a confirmed criminal, a rapist, an idiot or an imbecile, and that there is no probability of improvement of the mental and physical condition of said inmate, it shall be lawful for the said surgeons, or either of them, to perform such operation for the prevention of procreation by said inmate as shall be decided safest and most effective, said surgeon, or surgeons, to receive no additional remuneration; provided, however, that in no case shall the consultation fee for surgeon and alienist be more than five dollars to each expert, to be paid out of the funds appropriated for the maintenance of such institution.

From the Juornal, A. M. A., April 23, 1910.

LOCAL ANESTHESIA WITH QUININ AND UREA HYDROCHLORID.

Henry Thibault, M. D., Scott, Ark.

The following report of an experience with the bimuriate of quinin and urea hydrochlorid may prove of some value to surgeons doing abdominal work, especially in cases in which general anesthesia is undesirable.

History.—Strangulation of an old inguinal hernia occurred, March 10, in a negress, aged 64, who had, in addition, inoperable cancer of the uterus and rectum. The circulation was poor. There were arrhythmia, edema, considerable arterial sclerosis, beginning dilatation of the heart; slight cough, some pulmonary secretion and a parenchymatous nephritis.

Operation. — Immediate operation was necessary and both physicians called in consultation thought that general anesthesia would almost certainly prove fatal. The operation was done under local anesthesia, induced by injecting a 0.25 per cent. solution of quinin and urea hydrochlorid. The tissues above the canal were moderately infilterated with the solution, and there was no pain until after the canal was laid open, when the peritoneum was found to be quite sensitive. About 2 drams of the warmed solution was poured into the canal and in a few minutes there was perfect anesthesia of the parietal peritoneum and the operation was finished without the patient at any subsequent time feeling any pain, although considerable adhesions were broken up. There was no local reaction in the peritoneum, union was primary and there was no shock. The fluid poured into the canal gradually escaped into the abdomen as the adhesions were broken up. There was no pain after the operation and nothing to indicate that any peritoneal irritation had taken place.

While it is dangerous to draw conclusions from a single case, this report is at least worth attention and suggests that the solution might be poured into the abdomen and more extensive operations done without pain or injury to the patient, as the presence of the solution seems to render the handling of the abdominal viscera painless.

The Professional Anesthetist.—To the patient the professional anesthetist is of inestimable value for he re-

lieves the surgeon totally of the worries of the anesthetic and permits him to give all his attention to the operation. To the surgeon he gives a feeling of confidence which knows no value. Due to his experience and skill, the professional anesthetist can usually learn the anesthetic characteristics of the patient. He knows when it is advisable or necessary to administer hypodermics of strychnin, morphin, scopolamin or atropin. He knows what preliminary anesthetic it is best to administer and what general one should follow, how to avoid the dangers when it becomes necessary to change from one anesthetic to another.—E Metzenbaum, in Ohio State Medical Journal.—From Jour. A. M. A.

AN IMPORTANT UTERO-OVARIAN SEDATIVE, ANODYNE AND TONIC.

While it is unquestionably true that many cases of pelvic diseases in women are amenable only to surgical treatment, it is quite evident that there are not a few in which, for some reason or other, operative measures are out of the question. Among these may be included the many cases of dysmenorrhea and ovarian hyperesthesia, for the relief of which recourse is too frequently had by the patients to alcohol, the narcotics, or some of the much-vaunted nostrums on the market.

It has been shown to be a mistake to suppose that sustantial and lasting benefit cannot be obtained in these ailments by the internal administration of therapeutic agents, a number of which have been thoroughly tried, with results often satisfactory, sometimes brilliant. An agent of undoubted value in such cases is Liquor Sedans, a preparation introduced to the medical profession many years ago by Messrs. Parke, Davis & Co., and esteemed and prescribed by physicians to an extent, it is believed, not equalled by any similar compound.

Liquor Sedans is composed of three of the most important sedatives, anondynes and tonics to the female reproductive tract; namely, black haw, hydrastis and Jamaica dogwood—so combined with aromatics as to constitute a very acceptable preparation, being in this respect unlike some other agents of a similar nature which are ordinarily taken with great reluctance. It is of marked usefulness in the treatment of functional dysmenorrhea, menorrhagia, ovaran irritability, menstrual irregularity, etc., Parke, Davis & Co., also manufacture Liquor Sedans Rx. 2 (without sugar), which is precisely like the older formula but for the omission noted, and which is available for use in cases in which sugar is contraindicated; also Liquor Sedans with Cascara, which is of the same composition as Liquor Sedans except that each fluid ounce contains 40 minims of the fluid extract of cascara sagada, giving to the formula an important tonic-laxative value.

Removal of Tumors of the Pituitary Body.

Allen B. Kanavel and Julius Grinker, (Surgery, Gynecology and Obstetrics, Chicago, April 1910.)

Kanavel and Grinker report a case of malignant tumor (sarcoma) of the pituitary body, removed in part

by operation with primary recovery but with ultimate return and death. The steps of the operation are described and the suggestion is made that the operation be done in two steps. The patient was given urotropin for three days prior to the operation and the intestinal canal was throughly evacuated. The nasal cavity was packed with gauze shortly before operation, the gauze being soaked in an adrenalin solution. Ether was given at first by the mouth and later by the rectum after the method of Besley-Churchill. The adrenalin gauze was removed and the naso-pharynx pulgged.

A U shaped incision through the skin with the point close under the ala and close to the nose below and to the upper end of the crease between the ala and the cheek, the curve outward, gave abundant room. The lower part of the nose was separated from the bony orifice by a periostome and the septum was left intact. Then the cartilage was separated from the vomer and the perpendicular plate of the ethmoid and the nose was turned up and held with a retractor. An opening was made through vomer and perpendicular plate of the ethmoid and the left sphenodial cell opened with a chisel, and from this access was had to the right cell. The distance to the sella turcica had been marked by means of an x-ray plate and measured on the chisel. The chisel was placed on the lower part of the sella turcica and a slight blow carried it through. The tumor bulged into the opening and was removed in part by a curette. Bleeding was free, but not alarming. After removing a tumor near the size of a marble the opening was packed with strip gauze. The nose was sutured in place with horse hair.

The patient did well for about two weeks, but then gradually relapsed into his condition before operation and finally died. The symptoms were those of a recurrence of the tumor—a sarcoma—and was evidently due to this. No autopsy was obtained.

A resume of the symptoms is given and is most interesting. The diagnosis made before operation was confirmed by the operative findings.

IMPARIED GASTRIC MOTILITY, AS A FACTOR IN DIGESTIVE DISTURBANCE.*

By John N. Upshur, M. D., Richmond, Va., Ex-President and Honorary Fellow of the Richmond Academy of Medicine and Surgery, of the State Medical Society of Virginia, of the Tri-State Medical Association of the Carolinas and Virginia; Honorary Fellow of the State Medical Society of W. Va.

Digestion to be normal must be rapid, painless, and complete. An essential factor in this condition is that gastric peristalsis shall be vigorous enough to thoroughly incorporate the food taken into the stomach with the gastric juice, and when the process is completed, pass it on to the small intestine for assimilation, or completion of the process of digestion of such articles of food as simply undergo solution in the stomach. That the gastric motility should be vigorous enough depends on the nervous force which is the stimulant to gastric motion, failing in which fermentation of food occurs, and faulty solution and assimilation results. It is easy to see what ills follow in the train of this condition. Of course in the more acute digestive disturbance the source of trouble may be in the stomach itself, but these cases are transient and soon relieved. We have under consideration those cases of gastric disorder more or less chronic in character. In these cases a test meal and analysis of the same, shows the condition present in the viscus itself, but it does not clear up the cause on which it depends. Relief in these cases can only be partial and palliative, and not permanent, if confined to lavage, electricity, and exhibition of such drugs as only exert their influence on the stomach itself, it is like whipping a foundered horse, and in the end adds to the gravity of the trouble. One of the popular remedies is some form of digestive ferment; in the experience of the writer they are absolutely useless. No man has ever discovered how much gastric juice is secreted for the digestion of a given meal; it is like the grinding of the mill, the water flows over the wheel until the grinding is done and then stops. When food is put into the stomach it stimulates the flow of gastric juice until digestion is complete, and then stops; the pitiful dose of digestive ferment is simply wasted and lost in a quart or three pints of fluid composed of dissolved food and gastric juice, and is too puny to exert any influence. Wrong inference is drawn as to their action because the rule is to give them with active agents like dilute muriatic acid and strychnia, which do exert a very decided influence. Many, indeed I may say most, of the cases of gastric disturbance of a functional nature are seen in business men, who have had a let-down from business strain; professional men laboring under nerve tension, irregular meals, and hours of rest and recreation; women breaking down from the exactions of household cares, or the demands of social rush and dissipation, imparied general health from nursing, or too rapid child bearing, or the use of means to prevent conception, that they may be exempt from the demands of true

*Read before the Tri-State Medical Association at the meeting in Richmond, Va., February 15-17, 1910.

womanhood in the care of children, or it may be nervous break-down, reflex from pelvic lesions following difficult labor, or in younger women, those conditions functional, or organic, which lay back of a distressing dysmenorrhœa. Organic disease of the stomach, cancer or ulcer, or the stricture of the pylorus resulting from such lesions, are not under consideration. Nor those cases of stomach deformity or misplacement brought on in women by tight lacing. These are the cases to be referred to the surgeon for such operative interference as is indicated for the purpose of establishing a proper drainage.

But we do see serious cases of gastric dilatation where there is no obstruction at the pylorus. Deficient gastric motility results in fermentation, development of large volumes of gas, and stretching of the stomach, until it is in a condition of almost complete paresis. The atony of the stomach in the aged, resultant fermentation distention of the stomach with gas, crowding of the heart by upward pressure on the diaphragm. Often in these cases there is existent a myocarditis, patient suffers with distressing dyspnea, and agents addressed to increasing and sustaining the heart action fail to give relief. The nervous system suffers secondarily also, because of the toxæmia from absportion of toxic gases. In those subjects young enough to respond to the therapy of rest, nervines, lavage, and electricity, improvement in the motor vigor of the stomach means relief and cure of the dilatation, and complete restoration to health. I recently had under my care a physician, whose life, as to meals and sleep, was very irregular, the heartiest meal of the day being at night, when the stomach muscles, as well as all the rest of the muscular system, was tired. He was in the prime of life, not forty years old, had distressing cardiac symptoms on retiring, pulse missed a beat every now and then, and respiration interfered with. Was diagnosed by a competent physician as cardic trouble, primarily. I found him with slow digestion, excessive fermentation, sense of distress in epigastrium. He was completely and promptly relieved by therapy addressed to improve motility, strychnine being a conspicuous agent, and regulation of diet, insisting on last meal of the day being a light one, and regularity in hours of eating and sleeping. In another case, a woman past fifty, sick for years previous to consulting me. She had distressing general eczema, had lost flesh, had imparied digestion, and diarrhœa from fermentation. Health had begun to fail after she had had much trouble and affliction in the loss of her husband. Remedies addressed to the upbuilding of her nervous system, with nutritious and easily digestible diet, brought prompt relief. in short, the point I wish to emphasize, is that very many of the cases which come under our observation of intractible indigestion, are due to interference with the physiologic function of the stomach, because of faulty and imparied motility, back of which is some interference or lowering of nervous force, because of some condition outside of the stomach, break down physical and mental from excessive strain of some kind.

A word in conclusion as to the drugs indicated in the therapy of these cases. None stands ahead of

strychnia, given in full doses and long continued, but I want to call especial attention to *condurango;* it is described as an astringent bitter, I am sure that it is more. Clinical osbervation has revealed the fact that the usual dose, (forty drops of the Fl. Ex.), given to susceptible subjects will produce vertigo and ringing in the ears. I feel confident,as the result of much clinical observation, that it has the especial property of stimulating gastric motility; in my hands I have had no remedy more prompt in relieving accumulation of gas in the stomach from fermentation, and giving tone to the stomach. Lavage does good, not simply by relieving the stomach of undigested and fermenting detritus, but I believe more certainly as a direct means of massage of the stomach muscle; of course it is useful only as an adjuvant. In this day of specialism, the great need is to look beyond the organ specialized, for many times, the breadth of mind and ability which does this will solve a difficult problem, which will not respond to remedies addressed solely to the diseased organ or function. It is always bad to look at things through a crack, or with a bias in the direction of the thing specialized.

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SOUTH CAROLINA MEDICAL ASSOCIATION.

Next Annual Meeting at Laurens, S. C., April 20, 1910.
House of Delegates Convenes April 19, at 2 p. m.

District No. 1: Charleston, Berkley, Dorchester, Colleton, and Beaufort. Councilor, Dr. J. T. Taylor, Adams Run, 1911.

District No. 2: Orangeburg, Bamberg, Lexington and Calhoun. Councilor, Dr. W. P. Timmerman, Batesburg, 1910.

District No. 3: Saluda, Newberry, Greenwood, Laurens and Abbeville. Councilor, Dr. O. B. Mayer, Newberry (Chairman of Board), 1911.

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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

"Application for entry as second class matter at the postoffice at Charleston, S. C., pending."

ANNUAL SUBSCRIPTION, $2.00.

VOL. VI. MAY, 1910. No. 5

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

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JOURNAL S. C., MED. ASS'N., CHARLESTON.

ORIGINAL ARTICLES.

THE NATURE OF NEURASTHENIA*

By Beverly R. Tucker, M. D., Richmond, Va.

accompained by malnutrition and

Neutrasthenia is often spoken of as nervous prostration or nervous exhaustion. Simple "nervousness" is not neurasthenia, but it can only be dismissed as such by a knowledge of what neutrasthenia really means. Neurasthenia is a chronic fatigue of the whole nervous system, with or without an hereditary basis, usually functional disturbances and is due to the inability to withstand the stress of life. By neurasthenia being hereditary we do not mean the disease is directly transmitted but that the children of neuropathic families frequently inherit a nervous system too weak and unstable to withstand the stress of life as can individuals of more sturdy ancestry.

Neurasthenia exists in all civilized countries and is not a modern fad as

*Read before the Tri-State Medical Association, Richmond, Va., February 1910.

some would have us believe. Much confusion has arisen in regard to the frequency of neurasthenia. Some neurologists even go so far as to practically deny its existence while some physicians label half their cases neurasthenia. This state of affairs is due usually in the first instance to the observer looking too intently upon the pychical side of the case picture at the expense of the physical side and in the second instance to a lack of the necessary physical and laboratory examinations to bring out the true diagnosis. Pure neurasthenia is not a very common condition and care must always be exercised making this diagnosis. Beard first described neurasthenia in 1869, and Weir Mitchell in 1874 first applied to it the proper treatment.

It occurs among all races, but is almost unknown in the full blooded negro, while the Hebrew race is said to be particularly susceptible. It is also said to occur more frequently in those living in a high altitude. Neurasthenics are often found in neuropathic families, and gout, rheumatism, syphilis, alcoholism and tuberculosis in the parents may predispose to it. Over education or an education deficient to meet the strains and ambitions of life, overwork in any sphere, especially if accompained by lack of exercise and over indulgence of eating, drinking or sexual intercourse are the chief etiological factors. Constipation, continued eye strain, irregular habits, toxic states, worries, grief, business strains, trauma, surgical operations, and the nursing of relatives and friends at times have causative relations.

The pathology of neurasthenia is that of exhaustion and deficient nutrition of the nerve elements, especially in the cells. It is interesting to note that Hodge and others in experiments upon animals have found recognizable changes in nerve centers from fatigue. While at present we class this disease with others as functional, there is a strong possibility that no such thing as functional disease exists.

The objective symptoms of neurasthenia are few but often conspicuous. There is usually an anxious, worried and tired facial expression. There may be nervous movements of the body and limbs or there may be extreme lassitude. The pupils are sometimes dilated and vasomotor flushes may be observed although there is usually more or less pallor. Malnutrition with loss in weight is usually present.

Dr. Jno. K. Mitchell divides the chief subjective symptoms, which are "variable and limitless" into groups which shade into one another. These we will follow more or less closely and elaborate upon them: First, fatigue symptoms; second, irriitable weakness; third, disorder of the will; fourth, psychic depression. Accompanying these are hosts of subsidiary and secondary symptoms. If we classify the major symptoms under the above heads we will find among the *fatigue symptoms* motor weakness, inability for long continued work or exercise, slowness of speech, "weariness not relieved by rest," and a subjective sense of fatigue or pain. Dull headaches may occur in various locations but are usually occipital, and eye strains, backaches, cold extremities, atonic constipation and feelings of soreness, pressure, and stiffness may be classed as fatigue symptoms.

Symptoms of *irritable weakness* may be constant movement of the

body or limbs, nervousness, exaggerrated reflexes, tremors, insomnia, muscular twitching functional cardiovascular disturbance, photophobia, or over-sensitiveness in hearing, smell or taste. There may be irritable weakness of the stomach often called gastric neurasthenia and usually due to hyperchlorhydria, or of the intestines, one form of which is mucous colitis, or of the genito-urinary apparatus, which may cause excessive and too frequent urination or decreased sexual control and nocturnal emissions, the so-called sexual neurasthenia. Palpitations, hot and cold flushes, throbbing arteries, tingling and other vasomotor disturbances, especially when incited by worry, frights and starts, are symptoms of irritable weakness.

Among the symptoms of *disorders of the will,* we may include hesitation, inability to make decisions or to command or control emotions; inability to form or to control regular habits, or to sustain interest and attention in outside things. We should make sure that these are acquired symptoms and are not a part of the patient's life habit. Anxiety, lack of courage, and the form of insomnia in which the patient has not will enough to give himself up to sleep also come under this head.

Psychic depression may be exhibited by vague fears. The patient does not want to be left alone, fears he has taken too much or too little medicine, fears darkness or high places, etc. Other forms of psychic depression may be manifested in dreams, irritability, sexual disgust, lessened consideration for the family, resentfulness, selfishness, anxiety, introspection, poor memory and others. We should be very careful here for if the phobias are very marked they may be true delusions, or hallucinations; if the dreams are a feature of the case we may be dealing with a hypnoid state, if irritability and resentfulness are violent we may have a case of manic depressive insanity, highly developed introspection and anxiety may prove the case one of hypochondriasis, while with loss of affection and poor memory we may have a beginning dementia præcox. The psychic symptoms of neurasthenia are mild and, under treatment at least, are usually quite transient.

A preneurasthenic state may at times be noted in which the above symptoms are less numerous and more vague. This state may disappear by the patient regulating his own life or by a change of environment, but often it develoups into true neurasthenia. An early diagnosis and the early institution of treatment mean a more certain cure and a shorter time in which to make it and we are hardly justified in letting the patient take the risk of a chance restoration to health.

In the writer's opinion there is a neurasthenia state accompanying the anxiety and strain of certain pathological conditions of long standing which need surgical operation, or more frequent perhaps, seen in post-operative cases in which the result of the operation has been imperfect or the surgical shock great or the convalescence unsatisfactory. These might be called cases of *Surgical neurasthenic states* and the symptoms classified under the same groups already mentioned. The pre-operative neurasthenic state should be treated by a preparation of the patient for operation, unless surgical urgency will not permit, by a partial rest treatment under a physician familiar with the treatment, then operative

procedure followed by the rest treatment. Post-operative neurasthenic states may or may not have had a pre-operative neurasthenic condition. When it appears the treatment indicated is the rest treatment.

The prevention of this surgical neurasthenic state is of the utmost importance and includes an early diagnosis of pathological conditions and every means of lessening the shock of the operation, chief among which are the administration of an appropriate sedative before operation, minimum length of anesthesia commensurate with surgical requirements, anesthetization deep enough to abolish reflexes and starining in major operations, prevention or prompt treatment of the nausea and vomiting following anesthetization, not keeping the patient too long in a strained position on the operating table, the avoidance of unnecessary trauma and stretching of viscera and tissues, the protection of body warmth and the use of stimulants and strong drugs during operation only when absolutely necessary and in quantities only sufficient to meet actual requirements.

After the operation consciousness should be retained in quiet surroundings and not in the presence of relatives and friends who excite the patient and stir their emotions and affections and who thus make the return to consciousness too sudden. The operating surgeon should see his patient as soon as the patient is able to understand some reassuring words. The neglect of this courtesy and the lack of early encouragement has caused surgical patients may restless nights and weary days. Allowing numerous visitors to see the patient, forced convalescence, an unsuitable room-mate, too early a return to the general diet and too short a stay in the hospital have frequently started a neurasthenic state which may not fully develop for weeks or months afterward.

The hospital conditions may have been excellent from a neurological standpoint but when the patient returns home the absence of hospital regularity and trained attention relieving all responsibility, may be keenly felt. The too early return to the cares of the home, to the annoyance of servants and children, perhaps to sexual, social and business obligations, all tend to nervous instability. Worry over financial difficulties incurred by the operation, hospital expenses and absence from home may also be factors. The same may be said of lack of surgical knowledge on the part of the patient and sometimes the home physician and the feeling of the patient that it is difficult to obtain advice about post-operative symptoms. All of this must be combatted by the family physician insisting that the home surroundings be made as advantageous to a well regulated life as possible and by his obtaining from the surgeon if necessary a knowledge of the after treatment of the case from a surgical standpoint. McGuire has recently called attention to some of these points.* What is said of operations with general anesthesia is for the most part true of those, severe in character, performed with local anesthesia. In the latter the patient should be prevented from seeing the operation by a towel placed over the eyes.

There is a form of neurasthenia due to a combination of shock and trauma designated as *acute traumatic* neurasthenia. This form of neurasthenia is extremely rare in those cases who have not already neuras-

thenic symptoms. It may occasionally occur acutely in the healthiest and apparently least predisposed subjects. An emotional shock may be great and the trauma slight or absent. If trauma is severe it is usually accompanied with considerable shock. In either case the neurasthenia if it occurs is usually sudden and profound. In one of my recent cases of neurasthenia an attempted assault was made upon a healthy and respected woman. In her terror she backed upon the corner of a marble washstand and struck her coccyx. About this time her son came into the room and shot her assailant in her presence. She was taken with a sudden, profound, typical neurasthenia and severe coccygodynia. Under the rest treatment with local applications to the coccyx she completely recovered in six weeks.

The diagnosis of neurasthenia has been said to be easy, but this is not the case, and many conditions, even some as far separated as typhoid fever or brain tumor, of which I know instances, have been diagnosed neurasthenia. The onset of many of the acute infectious diseases, of some mental disease, of tabes and hookworm disease may closely resemble it. Neurasthenia true is not of very frequent occurrence and a description of the disease should not include the various perversions, psychopathic states of mind, pronounced phobias, exaggerations of the ego, borderland mental conditions or even some of the depressive and anxiety psychoses so commonly labeled neurasthenia. These varied conditions may or may not be accompanied by a certain amount of fatigue and lack of initiative, but examination will show an inherent mental instability, an underdevelopment or perversion of moral, mental or physical growth exhibited by stigmata in the order of conduct, sexual life or judgment. Difficulty in adaption to environment or irregularity in the size, shape or character of their features and organs, may help to distinguish. On the other hand neurasthenia may and frequently does occur in people of high moral stamina and intellectual attainment and apparent physical development. A careful history should be taken, a thorough physical examination made and a temperature chart kept for each case. It is well to remember that in uncomplicated neurasthenia the deep reflexes are never lost, unless they happen to be congenitally so which occurs in one of five hundred persons, anesthesia is never present, the Babinski phehomena is never found, the pupils are never inactive nor permanently irregular, and insane delusions are not experienced.

Regarding the differential diagnosis from *hysteria* we may note that the two conditions may be combined. Hysteria has certain stigmata of its own as paralysis, contracted vision fields, reversed color fields and peculiar anesthesias. In hysteria there are emotional outbursts and paroxsyms, and fatigue is usually lacking. The more or less fixed and insane ideas of disease as regards body states seen in *hypochondriasis* are not present in neurasthenia pure, but rather a simple retrospective anxiety. In *melancholia* we have the delusions of unworthiness, hallucinations, periods of agitation and depression and at times suicidal attempts, as distinctive symptoms. The condition called *pyschasthenia* has not, in the writer's opinion, been sufficiently worked out symptomatically to justify its being considered as yet a distinct clinical entity. Conditions of

hyperthroidism including the early stage of exophthalmic goitre, are often mistaken for neurasthenia. In hyperthyroidism the thyroid may or may not be found enlarged and tachycardia is the chief distinguishing feature and when combined with tremor, decreased chest expansion and vasomotor flush this condition should be suspected whether exophthalmos appears or not.

The course of neurasthenia may be a few weeks or many years, dependent upon circumstances and treatment. It may be cured and return, occasionally it is incurable, but in the large majority of cases, it fortunately terminates favorably under the "rest treatment" if properly carried out.

GASTRIC ATONY*

By F. M. Durham, M. D., Columbia, S. C.

In this article, I shall dicuss Gastric Atony as the result of constitutional relaxation from asthenic or dystrophic causes rather than from mechanical opposition to the egress of food from the stomach. By Gastric Atony, I mean a simple anæmic-gastroptotic dyspepsia with digestive disturbances due solely to a relaxation of the muscular walls of the stomach, which is consequent to a general constitutional debility. The foods remain in the atonic stomach from one to about three hours longer than in the normal. When food remnants are habitually found in the morning stomach and can be demonstrated by the stomach wash, this delay in emptying itself is most frequently the result of mechanical opposition, as pyloric or duodenal stenosis. This produces marked myasthenia gastrica, but as it is a local causative factor and often surgical in nature, I will not discuss it.

Simple Gastric Atony is the most frequent disorder that the human stomach is heir to, yet it is less frequently diagnosed. We physicians often make a hurried diagnosis and term it nervous dyspepsia, fermentative dypsepsia, catarrah of the stomach or a legion of other names, or we cover the whole train of symptons with the large and charitable blanket —neurasthenia. We are inclined to view anæmic-gastroptotic dyspepsia as a local stomachic condition rather than from a systemic standpoint with local manifestations.

Etiology:

A.—Inheritance. As in the habitus enteropticus.

B.—Acquired. As the constitutional weakening that follows ill health.

As to inheritance, Stiller says: "The predisposition shows itself even in the child in the atonic habitus—thin bone structure, long, flat and sunken thorax, sharply sloping ribs and wide intercostal spaces. The angulus epigastricus, upper and lower chest apertures, as well as the pelvis are narrow. The cranium outweighs the face, owing to the delicate and pointed lower jaw, the zygo-

*Read before the South Carolina Medical Association at Laurens, S. C., April 19, 1910.

matic bones and nose being small in size also. This congenital, mostly inherited asthenic predisposition tends to lead to a chain of disorders, which as a rule, show themselves after pubescense and together with the congenital habitus from the disease. These disorders are manifold; but among them appear most often four large groups, i, e. enteroptosic, nervous dyspepsia, neurasthenia and dystrophia." The epigastrium and hypochondrium have a greater vertical than transverse diameter in the habitus enteropticus and this tends to cause a ptosis of the stomach, intestines and kidneys when the abdominal wall is weak and the mesentery deficient in fat. Uterine displacements are frequent, owing to the sagging of the abdominal viscera with consequent pressure upon uterus.

When these individuals have a systemic relaxation the muscular fibers of the stomach and intestines are often first to show the inroads of the disease by various digestive troubles.

This class of persons furnish the greater per cent. of tubercular subjects, and furnishes the reason why forced feeding and pure air gives its beneficial results in combatting the great white plague.

As to Acquired Causes.

Our present high tension mode of living, over-eating, under eating, deficient mastication from bad teeth, improper ventilation, frequent pregnancies, long periods of lactation: In fact, anything that lowers vitality. Of the diseases of this section of the country, malaria stands first. I have not seen a case of chronic malaria that was not complicated with Gastric Atony.

Tuberculosis is quite a potent factor.

Symptomatology: This disease presents itself to the subject as gas forming or fermentative dyspepsia with nervous or cardiac manifestation. They often have cardiophobia and have a mania for having their hearts examined by every available physician. They are nervous, and if insomnia exists, quite frequently they are fearful of their own mental condition and have a distaste for mingling in society, or their minds are so concentrated on their ailments that they habitually discuss their malady. There is a sensation of pressure or weight in the stomach after meals, but in uncomplicated cases there is an absence of pain. The appetite is poor, which is the result of a food phobia. The fear of eating is caused by the consequent gas formation, eructations, sensation of weight or pressure in the stomach. In marked cases, a dish of soup will cause disturbances. These patients tire easily, and often the sensation of hunger is manifested as a feeling of extreme weakness which is relieved by taking food. Constipation is common owing to the small amount of food eaten. They are very much improved during pregnancy, owing to the tendency to take on fat and the gravid uterus furnishing a support to the relaxed abdominal viscera.

The objective symptoms are:

The enteroptotic habitus, anaemia, general emaciation, the descent of the greater curvature of the stomach, splashing sounds in the stomach and a general abdominal relaxation. The Boas-Ewald test breakfast shows great variations as to acids—may be super-acid at one time and subacid at another in the same individual The fluid portion of the stomach contents is often greater than the solid portion owing to the

slight retention of food irritating the gastric glands. Leube's test dinner should be out of the stomach in seven hours if motility and secretion are normal.

Diagnosis: As anaemic gastroptotic dyspepsia is functional and systemic in its nature, it is easily diagnosed from organic and local diseases of the stomach by the habitus, anaemia, general emaciation, splashing sounds, variableness in the acidity and delayed emptying of the stomach contents, the tendency to tire easily, sensation of weight or pressure in the stomach after eating and the absence of pain.

However, gastric atony must be differentiated from chronic catarrah of the stomach. This can only be accomplished by gastric analysis. It is differentiated from pyloric senosis by the absence of stagnation, vomiting of old food remains and stomach stiffening.

The Prognosis:

In uncomplicated cases is good. However, the disease is eminently chronic and often appears at times in the same individual from childhood to old age.

Treatment:

The treatment is hygenic, dietetic, mechanical and medical. A good, clean, healthy skin, good teeth and a clean mouth, thorough mastication of foods and fresh air are imperative.

The diet should be bountiful, increased to the point of forced feeding with highly nutritious and easily digestible foods. Give five or six small meals daily rather than overload the stomach with three large ones. Do not discontinue forced feeding for any digestive disturbances except pain or burning in the stomach and diarrhoea.

Insist on absolute rest of mind and body. Weigh patient at intervals and just as soon as they note the gain in weight they will become enthusiastic in pursuing treatment and symptoms will disappear. If patient is extremely nervous demand absolute rest in bed on the piazza or in a well ventilated room.

The mechanical treatment consists in passive movements, massage, spraying the abdomen alternately with hot and cold water. Bandages and supporting corsets are at times of service, but a good, strong abdominal wall reinforced by a normal amount of messenteric fat is by far the better support. Lavage is indicated only in severe cases with a tendency to stagnation.

The medical treatment consists in giving small doses of the bitter tonics before meals to stimulate the appetite. Beware of bromides and other hypnotics.

The object of this paper is to call attention to

(1) That all sufferers from indigestion are not guilty of overeating and that one of our most common disorders of the stomach is frequently the result of undereating.

(2) That the greater per cent of our tubercular subjects are of the habitus enteroptotic type and for this reason a liberal diet and pure air are so beneficial in combatting the great white plague.

(3) That better results are obtained in the production of fat from small meals frequently repeated than from three large meals at longer intervals.

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PLACENTA PREVIA--ITS TREATMENT AND REPORT OF CASES

By H. R. Black, M. D.

Mr. President and Gentlemen:

As placenta previa is the most serious complication of pregnancy and labor, I shall endeavor to discuss it briefly.

While our knowledge of placenta previa and its danger dates back several centuries, yet little was known of its production and treatment "until Barnes promulgated his views."

By this abnormality we mean the attachment of the placenta to the lower segment of the uterus, or at the cervix, the separation of which is invariably followed by hemorrhage during dilation.

Most writers on this subject have considered three varities, namely: the central, partial and marginal. As the latter is situated higher up and cannot be palpated until the cervix is sufficiently dilated, it will not be considered. As hemorrhage does not always occur, it is often overlooked.

Of the remaining two kinds, the central is the more dangerous, because:

1st. In it the placenta covers the internal os, while in the second, the os is partially covered. However, it is not always possible to differentiate between the two before labor.

In partial placenta previa, the os may be entirely covered during pregnancy, but only partially so after dilation. Hemorrhage is inevitable in both varieties on account of the partial separation of the placenta "in consequence of the formation of the lower uterine segment and dilation of the cervix; the hemorrhage is, therefore, unavoidable." Fortunately for mothers, this abnormality is comparatively rare. Williams has estimated about one in 250 hospital cases, and one in a thousand private cases. "Of the relative frequency of the two, "the weight of authority seems to be in favor of the partial variety.

Etiology: A relaxed condition of the uterus, disease of its lining membrane, and frequent pregnancy seem to favor this abnormal condition. In primipara, it is comparatively rare.

As to its mode of formation, Williams, of Johns Hopkins, says that "it appears probable that in most cases placenta previa results from the primary implantation of the ovum in the lower portion of the uterus, associated with extensive cleavage of the decidua vera, by which the extension of the placenta to the region of the internal os is facilitated. At the same time, the possibility of its occasional development from a reflex placenta must be admitted."

Symptoms: This complication is usually suspected when hemorrhage appears—after the middle half of pregnancy. Cases of abortion in the third month have been reported as being due to placenta previa. The bleeding may appear at any time after the fifth or sixth month of pregnancy in central placenta previa, but if the placenta be implanted higher up—especially in the marginal va-

*Read before the South Carolina Medical Association, Anderson, S. C., April 19, 1909.

riety—it may not appear until labor begins, if then. It may be continuous, or it may cease spontaneously, to recur again when least expected. Rarely is the initial hemorrhage fatal.

To understand the exact source of hemorrhage, as well as the cause, we must appreciate the changes which take place in the lower uterine segment, and in the cervix during the latter days of pregnancy and labor. In the central variety, the placenta is separated from its attachments as the os dilates, consequently, the hemorrhage from "the intervillous spaces and vessesls of the decidua follow."

Again, the ovum cannot follow the contraction of the lower uterine segment, as the latter develops, which also favors a rupture of the placenta from its margin. Neither is it possible for the stretched fibers of the lower uterine segment to compress the bleeding vessels.

Usually, the diagnosis is not difficult. Hemorrhage during the latter half of pregnancy should always arouse suspicion, especially in the absence of an injury or strain. It should not be forgotten, however, that an eroded cervix will easily bleed, but the use of a speculum will set aside any doubt, or the index finger of an aseptic hand carried through the internal os—if it be sufficiently patulous—when a soft, pulpy mass can be felt, if the placenta be centrally inserted.

If partially so, the margin will be detected if the placenta is not attached too high up, which of course would depend upon the amount of dilatation.

If the os is not sufficiently dilated to admit one or two fingers to pass through the internal os, dilate the cervix sufficiently with any dilator you may have at hand. If this cannot be done without lacerating the cervix, pack the cervical canal with aseptic gauze—also the vagina, even if premature labor result, as the sense of touch is the only means we have of ascertaining the presence of this abnormality. However, as a rule, the os is sufficiently dilated to allow the finger to pass through the internal os.

Prognosis: The maternal mortality depends upon the variety, "the patient's condition, the method of delivery," and the individual skill of the phyisician, as well—but central placenta previa is a most dangerous and fatal complication.

Muller says: "From 36% to 40% of mothers perish, and about 66% of children." Hofmeier, Behm and Lomer report a maternal mortality of 4-5% in 178 cases by the combined version by Brax ton Hicks procedure, and Koblank 3-8% in 467 cases, and Strassman reports 5% in 100 cases. This is an exceedingly low death rate indeed—much less than that of the average physician or obstetrician, whose record of mortality will not be less than 50%, because he is called upon to operate under the most unfavorable circustances and without any preparation whatever, and frequently upon patients who have already bled below the danger line. That has been my experience.

Having made a diagnosis—a correct one—the next most important step is delivery. Hemorrhage is dangerous; the uterus should, therefore, be emptied as speedily as possible. The majority of children perish, and the mother's life is in great danger. Treat each case on its own merits, and according to your individual skill.

If, during pregnancy, the cervix is not sufficiently patulous to admit one or two fingers of the operator, dilate with a dilator, under chloroform anaesthesia.

If the placenta partially overlaps the os, rupture the membranes, or if centrally inserted, perforate and introduce a Champetiere de Ribes balloon, or use Braxton Hicks maneuver, bring down a foot and pack with the breech, which will usually control the hemorrhage. Bear in mind that a hasty delivery, before the cervix is sufficiently dilated to pass the head, may result in deep cervical tears, and dangerous hemorrhage.

Twice have I seen profuse hemorrhage follow deep cervical tears in instrumental delivery. However useful Champetiere de Ribes' balloon may be in opening the cervix, the average physician will rarely have one at hand—therefore turn to Braxton Hicks' procedure, which is made "by passing two fingers of one hand through the cervix, pressing up the head, while the other hand raises the body of the foetus and head and endeavors to push the trunk downward into the brim of the pelvis."

This operation requires much skill and the average physician will frequently fail to perform version by this procedure. He is then left with only one alternative, namely: Pass the aseptic hand into the uterine cavity, seize a foot, turn, and deliver.

If the os is so rigid that it cannot be opened without laceration, pack the cervical canal and the vagina tightly with sterile gauze, so as to make a firm pressure; renew the packing, if necessary, or introduce the rubber bag above referred to. But don't forget that sepsis frequently follows hemorrhage, and the obstetrician who fails to observe strict aseptic technique may save his patient's life from hemorrhage, only to perish a few days later from sepsis.

If, however, the patient is in labor when you are called, aid dialatation—by stretching, *manual* or otherwise. If necessary, go through the placenta or rupture membranes and go around, according as you have to deal with a central or partial placenta previa, and deliver as promptly as possible, either by version or forceps, as the indication may be. The placenta usually follows, and should be removed promptly as its presence in the lower uterine segment interferes with contraction. Having removed it, mead the uterus.

If the hemorrhage persists, hot intra-uterine douches of sterile vinegar, or salt solution, should be used —or gauze pack—ergot or ergotol hypodermically, and saline transfusion, if necessary.

If, however, the uterus contracts and hemorrhage continues, look for bleeding points in the cervix and vagina and secure any that may be found.

Report of Caces.

On the 20th day of December, 1906, Mary T——, negress, aged 38 years, was taken with a profuse hemorrhage. A midwife was summoned, and after a week or ten days of repeated floodings, Dr. J. F. Williams, of Roebuck, S. C., was asked to see the case. He made a diagnosis of central placenta previa. I saw the case one hour later in consultation with him. The hemorrhage had ceased. The membranes had ruptured, either spontaneously or by the interference of the midwife—fortunately so, as it allowed the head to come down and act as a compress.

The os being sufficiently dilated, the placenta was perforated, a foot seized, and the child was turned and delivered, very speedily and without hemorrhage and with as little additional shock as could be reasonably expected under the circumstances. But as the patient had already bled below the danger line, before the physician's visit, and as she was very weak, with a small thready pulse of 160 strokes per minute, she died in a few hours, in spite of heart stimulants administered hypodermatically, and saline enemas, A saline transfusion was not given, as the hour of delivery was eleven o'clock P. M. in a negro cabin, without sufficient light, and without anything in which to sterilize.

Case No. 2—Mrs. G——, white, aged 37. Mother of three children, History good. Was seized with a copious hemorrhage while drawing water at the well. With much difficulty she managed to get back to the house, where she was put to bed. Dr. J. R. Brown of Spartanburg City, was instantly summoned, and saw her about one hour later. She was still bleeding, and he was compelled to pack the vagina at once to prevent a fatal hemorrhage. Two hours later, I saw the patient, in consultation. Her time was practically up, but she had been bleeding at short intervals in gushes during the past two weeks. "It was like pulling out the stopper suddenly," as she expressed it. Fully conscious of the danger, the vaginal tampon was removed and the index finger of the operator's aseptic right hand was carefully passed through the internal os, which was about the size of a silver half-dollar, where a soft, spongy or pulpy mass overlapping it was detected. But before the examination could scarcely be completed, the blood simply poured.

Having prepared for the emergency, the hand was quickly withdrawn, and seizing a yard of sterile gauze with a pair of dressing forceps, it was carried through the internal os, where it was packed tightly, filling the vagina below. But for this preparation and speedy work, I believe the patient would have perished in my hands. Ergotol, which usually produces contraction of the uterus after tamponing, was given hypodermically. As the patient had become partially blind and very weak from loss of blood, heart stimulants and a saline enema were given. She rallied in less than an hour. As there was no leakage, nothing further was given or done during the next 36 hours except to watch the patient at short intervals, and prepare for her delivery. The patient now being in good condition, with two other physicians and a couple of trained nurses, she was placed on the table and the tampon was removed under chloroform narcosis. The os dilation was sufficient, the placenta was ruptured and one hand of the operator passed into uterine cavity, where one foot was seized and brought down quickly, as the blood was pouring. It was a straight battle with death, with the odds against us—therefore, no time was lost in delivery of both the child and the placenta, which was followed by a perfect sluice of blood. Such a hemorrhage which followed was enough to chill the blood of the most experienced operator.

Quickly the uterus was grasped through the abdominal wall, antiflexed and kneaded vigorously. At the same time, a hot sterile saline intrauterine douche—which had been prepared, and which is best of all—was

given. The uterus contracted and the hemorrhage ceased. The uterus was kept in the grasp of the left hand of the operator for at least thirty minutes, when the patient was considered practically safe and put to bed. In the meantime, she was given a saline enema, a hypodermic injection of strychnine and ergotol. After the lapse of an hour, she said she was bleeding, but the uterus was still contracted and there was no flow. Twenty minutes later, she threw up her hands and exclaimed in a loud voice that she was bleeding to death. The uterus relaxed while in the grasp of the hand, and was followed by a small gush of blood, a slight convulsion and loss of consciousness. A vein of the arm was opened, and a quart of normal salt solution was transfused.

Hypos of heart stimulants and ergot were given, but in spite of our efforts, she died within an hours time—in my opinion, as much or more from fright as from the loss of blood. Although it was great, yet she was fully conscious of the great danger that awaited her delivery—consequently, very much alarmed about her condition.

Sudden profuse hemorrhage, such as in the case just mentioned can only be met successfully with a gauze tampon, but if called to treat a similar case, I would tampon just as I did, but when removing it, I would endeavor to tie the uterine arteries through the vagina, and then proceed to deliver according to the merits of the case.

Less than a week after this, I received a 'phone message from Dr. A. M. Allen, urging me to come out on first car to Glendale, six miles away, to see a case of placenta previa that was bleeding. I suggested a tampon. I arrived an hour later to find a leak. I removed the pack and applied another which remained in place about 30 hours. It was then removed, the os being sufficiently dilated, the placenta was perforated, and the child was delivered as before, without hemorrhage saving both mother and child.

Three cases of placenta previa in three weeks time, with a mortality of 66 2-3%—each.

Five years ago, I saw a case of placenta previa die in fifteen minutes after I reached the bedisde, with the child in utero. I obtained permission, and delivered my first and only dead patient—to save my reputation—that was to give no one a chance to say that I was present, and could not deliver.

I have seen other cases, but these are sufficient to demonstrate my method of handling them.

ADDRESS

Address delivered at the Annual commencement of the Medical College of the State of South Carolina by the Dean Dr. Robert Wilson, May 4, 1910.

Ladies and Gentlemen:

We are gathered together this evening for the purpose of bestowing, with due ceremonial, upon the successful candidates in Medicine and Pharmacy the right and title to practice their respective professions, and it gives me pleasure in behalf of the Trustees and Faculty to extend to

you a most cordial welcome.

The true significance of this exercise and the grave responsibility which rests upon us, the Trustees and Faculty, are, I believe, scarcely appreciated to the fullest extent.

Medicine is no longer a mysterious art, of narrow limitations, whose strongest appeal is to ignorance and superstition, but an enlightening science which in recent years, by achievements of surpassing beneficence and of vast economic value, has won a merited position in the foremost rank of the so-called applied sciences. Medicine of today enters into, and influences largely, every phase of modern society, contributing to the moral and social betterment of its members, as well as to their physical well being, and lending indispensable aid to commercial development and expansion. Truly it is no preposterous claim that medicine has become a potent civilizing agency which no community can afford to disregard. The training of medical men, therefore, assumes a new and deeper significance. The medical school of today is educating men not merely that they may earn respectable livelihoods, not solely that they may minister efficiently to the needs of the afflicted, but that they may become vital factors in the physical, moral, social and commercial life of the communities in which they may settle. This profound and far reaching influence which medicine is exerting upon modern society is developing a keen interest in medical education, and is leading the public to realize that medical colleges merit, at least as full a measure of support by private benefactions and by municipal and state appropriations as literary colleges enjoy.

The extraordinary growth and expansion of medical science has imposed upon the student of today a burden far heavier than that which was borne by his predecessors a generation ago. One of the results of the more complef modern cirriculum is the necessity of better preliminary training. Partly by a natural process of selection, and partly because of a general improvement in educational facilities, the elimination of the uneducated has been taking place slowly for several years, until to day the majority of men who seek admission into medical colleges are possessed of at least a good school education. The required standard however has been too low to exclude many whose equipment was insufficient, and the Faculty of the Medical College of the State of South Carolina, after mature deliberation, have determined to raise the entrance requirements to the level of a four year high school course. In doing so we are taking a step for which the South generally is regarded as unprepared, and one which only a few southern colleges so far have ventured to take. But our faith is strong in the final recognition of high endeavor, and that all work animated by the highest ideals is bound to achieve an ultimate success.

During the session which is closing tonight the College has continued to show encouraging evidence of healthy growth. The steadily increasing attendance of late years, which we have been gratified to note, may be in part the result of an increasing population, or perhaps of a growing need for well trained physicians. It is very significant that in the last fifty years there has been practically no change in the propor-

tion between physicians and population in the United States, notwithstanding the growing attendance in Medical schools. In South Carolina at present the proportion of physicians to population is less than in any State in the Union, there being one physician to every 655 of population for the entire country, while in South Carolina there is only one physician to every 1324 of population, a fact which affords a possible intimation that the increasing attendance in our colleges is due, to some extent at least, to the proper operation of natural causes.

Young gentlemen your Alma Mater is sending you forth tonight endowed with rights and privileges which are enjoyed in equal measure by the members of no other profession, and her parting prayer is that in your course through life, which rest assured she will follow with deep concern, you will be animated only by the loftiest ideals, and that

"Whatever record leap to light
She never shall be shamed."

Mr. President I now request that you confer the degrees of M. D. and Ph. G. respectively upon the following candidates:

In Medicine:
Thomas Lofton Ayers,
Charles Frederick Black,
Reuben Golding Blackburn,
Warren Hamilton Burgess,
Curtis Estes Crosby,
Theodore Marion DuBose, Jr.,
James Avery Finger, Jr.,
Lonie Clarence Floyd,
James Jeter Glenn,
Charles Davis Hanna,
Lewis Scott Hay,
William Leitch Heaner,
George Allworden Hennies,
William Tertius Lander,
Thomas Russell Littlejohn,
Simons Ravenel Lucas,
Stephen Madison McCaskill,
Charles Arden Mobley,
Lorie Wilson Moore,
Samuel Bryson Moore,
Clarence Edgerton Owens,
Marion Cherigny Palmer,
Eugene Goodbred Peek,
Richard Robert Prentiss,
Huger Richardson,
Floyd Dwight Rodgers,
Foster Miller Routh,
Frank Butler Sanders,
Oscar Barre Simpson,
William Atmar Smith,
Henry Jefferson Stuckey,
Paul Kent Switzer,
Luther Herbert Thomas.
Ervin Sifly Thompson,
Lionelle Dudley Wells,
William Eugene Whitlock,
Eugene Mood Williams,
Marion Hay Wyman,

In Pharmacy:
Clarence Eugene Andrews,
Richard Lafayette Burnet,
William Alexander Comar,
James Miller Duncan,
Charles Arthur Epps,
Wilford LeRoy Harrelson,
George Francis Heidt, Jr.
James Millard Horton,
Virtue Ogden Hopkins,
Charles Albert Johnson,
Abbott Edward Lake,
Samuel Walter Monroe,
Olin Scott Munnerlyn,
Lawrence Jetton Nettles,
Donald Fenton Sanders,
Ashby Turner,
Thomas Clyde Whetsell,
James Haskell Willcox,
Michael Robert Willis,
Clarence Woodward,

The following are the first nine, in order to merit, in the Medical class and are entitled to appointments upon the staff of the Roper Hospital:

Dr. J. A. Finger,
Dr. S. R. Lucas,
Dr. W. A. Smith,
Dr. W. L Heaner,
Dr. G. A. Hennis,
Dr. T. M. DuBose, Jr.
Dr. P. K. Switzer,
Dr. L. S. Hay,
Dr. F. B. Sanders,

The following are the first six in order of merit in the Pharmacy class:
J. M. Duncan, Ph. G.
L. J. Nettles, Ph. G.
W. L. Harrelson, Ph. G.
J. H. Willcox, Ph. G.
A. Turner, Ph. G.
V. O. Hopkins, Ph. G.

The College cup, awarded by the Faculty to the first honor graduate in Medicine, has been won by Dr. J. Avery Finger, Jr. The College Medal, awarded by the Faculty to the first honor graduate in Pharmacy, has been won by J. M. Duncan, Ph. G. The medal, offered by the South Carolina Pharmaceutical Association to the student standing the best examination in practical Pharmacy, has been won by C. A. Epps, Ph. G. The medals offered by the Kappa Psi Fraternity to the student graduating with the highest honors in Medicine and Pharmacy, have been won by Dr. J. A. Finger, Jr., and J. M. Duncan, Ph. G., respectively. The prize offered by the Professor of Practice of Medicine for the best report upon individual bedside work has been won by Dr. Simons R. Lucas.

FIRST AID IN INJURED EYES*

By Edward F. Parker, Charleston, S. C.

Among the causes of preventable blindness accidents at work and at play are important and frequent. The specialist sees many eyes whose recovery is jeopardized or whose sight is lost from the failure of the physician first seeing the case to observe some very simple rules for first aid.

All eyes injured whether of mechanic, thermic, chemic or electric origin are followed by inflammation of the superficial and perhaps the deeper structures, particularly the iris and uveal tract. Thorough disinfection, the use of atropine and a rest bandage are indicated in practically all cases. In wounds of the conjunctiva prompt suturing will save much contraction and granulation resulting from suppuration. Often as a sequel of burns the extent of the whole conjunctival sac is diminished. When the injury is from a caustic alkali, milk is the best cleansing agent, when from lime a drop of oil followed by a concentrated solution of cane sugar forms with the lime an insoluble compound. Atropine is always indicated in sufficient strength to dilate the pupil fully as soon as possible and efforts may be made if necessary to keep the eye-lids from contact with the eyeball.

The use of eye stone, crabs-eyes, or flaxseed grains is much to be deprecated as seldom of any use and often very irritating owing to sharp microscopic edges.

Foreign bodies on the cornea and

*Read before the South Carolina Medical Association at Laurens, S. C., April 20-21, 1910.

superficial erosions from the finger nail for example, unless carefully treated are often followed by hypopyon, keratitis, or pus in the anterior chamber, and subsequent panophthalmitis. Iron particles when thrown hot against the cornea melt and leave a brown tattoo mark which needs only careful scraping and disinfection and no attempt at further removal.

Pain, photophobia, and lacrymation when out of proportion to the apparent injury are always evidences of severe and serious infection.

Deep perforating wounds with prolapase of the iris call for good judgment and experience, or purulent keratitis and panophthalmitis follow, necessitating subsequent enucleation. To prevent infection or further infection, we apply strong acid disinfectants to the corneal wound. If the injury is very recent and seen promptly we can often replace the prolapsed iris and preserve for the patent a round normal pupil. If it is too late for this and inflamation has set in we may excise the prolapsed portion of the iris as neatly as possible, and replace the rest of the iris in good position.

In perforating wounds of the sclera as well as the cornea the first question is to determine whether a foreign body is in the eye-ball or not. When there is a doubt as to the perforation, a minus tension, a shallow anterior chamber, a prolapse of the iris or vitreous are unmistakable symptoms. If no foreign body is present healing may take place with or without much inflammation according to the extent of infection. If there is a foreign body, purulent inflammation of the uvea, with panophthalmitis and subsequent atrophy of the eye-ball, is apt to follow unless the foreign body is promptly removed.

Sympathetic opthalmia is very apt to follow these shrunken globes because they contain numbers of pathogenic organisms. Any perforating injury however insignificant must be regarded as dangerous.

Plastic iridoclysis is usually a safe indication for enuceation. Blows followed by blood in the anterior chamber are not necessarily serious and the blood is slowly absorbed.

Enucleation had better be performed on eyes blinded by inflammation following injury, or if the form and shape cannot be restored.

All injuries which make an opening in the capsule of the lens result in lenticular opacity. The complete absorption of the lens is usually prevented by closure of the capsule wound. The treatment of injuries to the eye-lids follows the general principles of surgery. Prompt and accurate apposition of the cut surface prevents deformity and disfigurement. In contusions cold compresses with lead water and opium are recommended and in emphysema a pressure bandage and care in blowing the nose is all that we can do.

In the accidents of work and play the liability to infection even in the simplest injuries is not duly appreciated by the general practitioner. Thorough disinfection of the wound, the prompt use of atropine, frequent cleasing with boric acid solutions and keeping the eye at rest with a bandage, unless the discharge is profuse, would save the eye-sight to many sightless eyes.

EXTRACT FROM NEWS & COURIER, MARCH 3, 1910.

DOCTORS HELD REUNION.

Members of Class of '89 enjoyed Banquet Last Night.

Physicians met at noon yesterday, organized and elected officers and in the evening celebrated the occasion with a dinner at the Charleston Hotel.

The Class of 1889, Medical College of the State of South Carolina, held its first reunion meeting in this city yesterday, the programme consisting of organization and election of officers at noon, and a banquet in the evening, both affairs being held at the Charleston Hotel. Only four non-Charleston members of the old class were able to make the trip. What the reunion, however, lacked in numbers, the members present made up in enthusiasm and spirit.

Drs. A. C. Dick, of Sumter, Wm. Ilderton, of Florence, W. S. Pack, of Greenville, and I. A. Bigger of Rock Hill, S. C., were the non-Charlestonians present at the meeting. A great majority of the members of the class of 1889, who found it impossible to be present wrote letters of regret, while Drs. W. O. Nesbit of Charlotte, N. C. and J. A. Rutledge, of Ashland, sent telegrams sincerely deploring the circumstances which withheld them from taking an active part in the reunion. Dr. C. S. Bratton of Palestine, Texas, enclosed a check for $5.00 in his letter of regret, which he wrote was to be used for "a cold bottle," this thoughtfulness on the part of the physician in Texas was appreciated by his class-mates who wired their thanks together with the statement that "one more would not hurt."

At the organization meeting held yesterday noon, at the Charleston Hotel it was decided that the members of the class meet every year, the night before the commencement exercises of the Medical College. The handful of the old class expressed themselves as enthusiastic over the successful effort at a yearly reunion. Tentative plans were discussed for the next reunion to be held in this city, and an effort will be made to induce every living member of the class to be present at that time. The following officers were elected after the organization of the reunion class:

Dr. R. P. Izlar, Waycross, Ga. President; Dr. Edward F. Parker, Charleston, Secty & Treas; Dr. A. E. Baker, Charleston, Historian; Dr. Lane Mullally, Asst. Historian; Dr. R. P. Izlar, of Waycross, Ga., it is stated, was the moving spirit in favor of a reunion of the members of the class of '89.

The banquet held at the Charleston Hotel last night at 9 o'clock was a delightful affair. Dr. Francis L. Parker former Dean of the Medical College and Drs. Manning Simons, and Allard Memminger, professors at the College at the time of the graduation of the class of '89 together with Dr. Robert Wilson, the present Dean, were invited to attend. Several informal speeches were made by the diners all of which proved to be enjoyable in the extreme. The members of the class of '89 hope that other classes of the Medical College will undertake reunions of their members in the near future.

Journal of the South Carolina Medical Association.

CHARLESTON, S. C.

PUBLICATION COMMITTEE.

Dr. O. B. Mayer, Newberry, S. C., Chairman.
Dr. F. M. Dwight, Wedgefield, S. C.
Dr. J. T. Taylor, Adams Run, S. C.

Dr. J. C. Sosnowski, Charleston, S. C., Editor.

EDITORIALS.

THE COUNTY SECRETARIES.

In this issue we print the Minutes of the Society of County Secretaries and also a most interesting and instructive paper by Dr. J. R. Young of Anderson on the work of the County Secretary. The Society had its inception last year, and was formed at Summerville. Already it has demonstrated its value not only to the Secretaries themselves but also to the profession at large. A considerable degree of interest and even enthusiasm was displayed by the members, and their good work is worthy of commendation.

Owing to the well known and deplorable lack of interest in the meetings of their County Societies displayed by too many of the physicians the country over, a conscientious secretary has a load of trouble on his shoulders from the time he takes office until sometime after he resigns or is supplanted. He is the burden bearer of the medical fraternity; to him are brought all the petty squabbles which mar the profession, to him the tales of unethical conduct, of small sayings and doings which have been retailed to one or another of the profession,—as a rule false or exaggerated tales; to him, the various grievances men may hold against each other, the Society, or the Association. And what is his reward? Most generally the sense of having worked hard for an unappreciative and querelous group of men who persist in misunderstanding all that is done for them, instead of a grateful and appreciative public.

It is a curious fact that physicians who ordinarily weigh and discount largely everything that is told them by patients and by the public, are so quick to believe the slightest hint of

evil about a fellow practitioner, no matter by whom the hint was made; and that they should harbor the little malicious tales they hear, and allow themselves to be influenced thereby. Many a man will not attend a meeting of his Society because possibly he has heard that some other member of the Society has said something about him, or has taken a patient from him, or some other equally petty thing, and he does not care to be associated with that physician in any way. If instead of sitting at home and harboring his ill feelings, he had gone to his Society meeting and met his alleged enemy, talked matters over quietly, and arrived at some amicable understanding, both he and his suppositious enemy would have been better off.

Before we condemn others unheard or on hearsay evidence, let us try to find out what was really said or done and why it was done—possibly we would have done the same thing as the other man under the same circumstances or with the same viewpoint. And, if a brother practitioner make a mistake, don't let us condemn him unreservedly but follow the Divine example and forgive him. Though he may have fallen, say of him in your heart, "Neither do I condemn thee—go thou and sin no more." By so doing shall we elevate ourselves to the dignity of true manhood and cease to be merely children of a larger growth, unreasoning, suspicious and futile.

It is this characteristic which gives to the County Secretary his greatest trouble—that of preserving unity and harmony among his fellow society members; and it is this tendency which the individual members should strive hardest to combat each in himself, in order to help both himself and others.

There is but one way for the profession to advance and that is to stand and move together, and to do this, they must aid their courier, the secretary, in every way possible.

THE SIMS MEMORIAL.

At the Meeting of the House of Delegates in Laurens, Dr. S. C. Baker of Sumter made his report as Chairman of the Sims Memorial Committee and a resolution was passed by the Delegates to the effect that the State Legislature be requested to raise half of the sum required, Nine Thousand Dollars ($9,000) for the construction of a suitable monument to J. Marion Sims, this appropriation to be contingent in the raising of an equal amount by the Medical Profession. This is a worthy move; no man has proved himself more worthy of being commemorated in stone or brass than our compatriot who rose from an obscure practice to be one of the lights of the profession shining before the whole world. To him the whole of mankind owes a deep debt of gratitude, for he has lightened their burden and has made Gynaecology a blessing instead of an opprobrium. To him the profession owes a vote of thanks, for he blazed the trail which has made much of modern surgery possible, and at the same time showed them what fortitude and patient endeavor will accomplish.

His writings read like the works of an explorer, as he was, of unknown countries. His tale of patient observation and experiment, from failure to failure to final success, is most inspiring. And through it all the keen

attention to every detail, the consideration of the patient, the gratitude for suggestion and help, the humble modesty, bespeak the great man.

No one of us should hesitate, but should be glad to assist in commemorating the life and deeds of a man so gracing his name, his State and his profession. Though he belonged not to South Carolina, but to the world, yet he was peculiairly ours; for here he was born, reared and in part trained.

THE MEDICAL COLLEGE.

The College in which Sims, with many others of note, received a part of his medical training, on May 4th held its 80th annual exercises after a most successful year. The Medical College of South Carolina has been gradually raising its standard year by year to keep abreast of the times and has at all terms made a creditable showing among the ranks of Medical Colleges.

A report of the Commencement Exercises will be made in another part of the Journal, along with the address delivered by the Dean Dr. Robert Wilson, Jr. A large number of Alumni were at the Exercises and later attended the Alumni Smoker.

MEDICAL INSPECTION OF SCHOOLS.

The subject introduced by Dr. Hines, of Seneca, in his article read at Laurens, is a most important one, and one of vital interest to the public as well as to the profession. It has been a short-sighted policy which so far has made the medical inspection of schools in the South a matter of indifference to the School Commissioners, and in some places of opposition.

Our children being the future builders of the country require that every care and consideration be shown them, and should claim as their right the safeguarding of their health in every way.

Many go to schools unfitted for proper mental work by some easily corrected physical infirmity as myopia, astigmatism, etc., others are placed in classes in which they are undeveloped, mentally misfits, and still others carry communicable and preventable diseases to their fellows. As to the grading of children by means of relative development and not by temporal age, so far we are in the stage of experiment and cannot require that this be done. We may believe that grading by physiological age is the proper method but we will have to present more evidence than we yet possess before we can convince our legislators and pedagogues. But as to the prevention of the spread of communicable diseases, and the correction of physical infirmities, we can do much, for here we come out of the dimness of speculation into the bright light of fact and can show figures and results to all doubters.

It is incumbent on us that we urge a State-wide Law requiring the medical inspection of all schools by competent inspectors at reasonable intervals. We recommend this for the consideration of the Committee on Public Policy and Legislation.

DEPARTMENT

OF THE SOCIETY OF MEDICAL SECRETARIES, SOUTH CAROLINA MEDICAL ASSOCIATION.

DR. ALLEN J. JERVEY, Charleston, Chairman.
DR. MARY R. BAKER, Columbia, Vice-Chairman.
DR. L. ROSA H. GANTT, Spartanburg, Sec. and Treas.

MEETING OF COUNTY SECRETARIES.

The second annual meeting of the County Secretaries was called to order on April 20th by Dr. A. J. Jervey, the Chairman, Dr. Jervey stating that the impromptu speech which he had intended to deliver would have to be left out, on account of the limited time in which to hold the meeting.

The roll was called by Dr. Rosa Gantt, the Secretary, the following being present:

Dr. C. C. Gambrell, Abbeville.
Dr. W. J. Burdell, Kershaw.
Dr. Mary R. Baker, Columbia.
Dr. E. H. Hines, Seneca.
Dr. L. Rosa H. Gantt, Spartanburg.
Dr. J. R. Young, Anderson.
Dr. J. D. Walters, Saluda.
Dr. R. B. Berry, Union.
Dr. J. T. Taylor, Councillor First District.
Dr. W. P. Timmerman, Councillor Second District.
Dr. O. B. Mayer, Councillor Third District.
Dr. J. F. Williams, Councillor Fourth District.
Dr. F. M. Dwight, Councillor Seventh District.
Dr. Walter Cheyne, State Secretary.

Doctors Harry H. Wyman of Aiken, and D. M. Michaux, of Dillon, were added to the membership list.

The minutes of the 1909 meeeting were read by Dr. Gantt, and approved.

Dr. Jervey:

The only report that I have to make, as President, is that I think there is a great deal for us to do. Last year was the organization of the Societies. We have accomplished that, and there is a great deal yet to be done.

In addition to what the County Secretary can do for his own Cou organization, this Society can be made of the utmost value to the Editor of the Journal, and to the State Secretary. Those are the two chief objects, I think, and with that end in view, I have asked Dr. Sosnowski, the Editor of the Journal, to come here this morning and say a few

words to the County Societies.

Dr. Sosnowski:

Mr. Chairman, Ladies and Gentlemen:

The last one of you know that the Editor of the Journal can make very little of it unless he has the support of the profession at large, and we want the support of the County Secretaries, in keeping us posted on the movement of medical affairs in the State. Whatever goes on, we want it. We want to know about it. If a county society calls a meeting, and it is not held, we want to know about it. The men in each County are interested, especially in their own county, as to what is going on, and want to see the record published in the Journal. Of course we want to know what is going on in the other counties in order to follow the medical affairs throughout the State. So, all the news department of the Journal depends on the County Secretaries. What little is picked up from the papers is generally inaccurate. We want the men to keep us posted themselves, on everything. In that way it helps to keep the interest of the profession up. For instance, a man who takes the Journal may not have a chance to attend your meeting. He gets the Journal, with the report, and it stimulates him. The next time he says, "I missed several good papers the last time, and some important discussions," and if he sees a full report of it in the Journal, it means the next time you have a meeting of your Society, he is going to want to come out to it.

So I ask each one of you to send me reports every month, and get them in on time, and I would prefer to have them typewritten, if possible.

If there is no report, there will be a record of it. "No report,"—and also, the second month, the same, and so on; and I hope that all of you will be rather ashamed to see a record come out for two succeeding months with "No report."

Of course we cannot tell what we will do in the future. I want all of you, if you have any criticism to make at any time, of the Journal, to let me know,—not knock me behind my back, but let me know what you have to say about it. Write it to me. I want, if possible, to please the profession in the State, and to put out a Journal which will be a credit to the State, if I am able to, but we cannot please every one, and we cannot know what men think of it unless they tell me. But if I hear a rumor of men in different parts of the State being dissatisfied with it, and of others who are pleased with it, how am I to know what to think? I want the men to come to me and tell me, if they have any kick coming, because it is only fair to a man, if you have a kick coming on what he is doing, to tell him squarely.

I want to keep posted on the movement of things in the counties; if any new men come in or go out; and any illegal practitioners practicing in the county, whether they are prosecuted or not; because men write to the Journal all the time, for such information, and we want to be an exchange for news. We do not want to simply publish the minutes of the State Association, but to have a real, live newspaper in addition to a medical journal.

Dr. Jervey stated that sometimes a county society only met perhaps two or three times a year, and what about the monthly report then? Dr. Sosnowski, however, insisted that

notice of such meetings could be sent in, as well as of the failure to meet, and that a letter could be sent telling of the county medical news even if no meetings were held.

The following Report was read by the Secretary, and received as information:

SECRETARY'S REPORT.

Spartanburg, S. C., April 19, 1910.

The South Carolina Society of Medical Secretaries has a total membership of thirty-four. Immediately after this Society was organized, the secretary wrote to every County Secretary and Councillor who was not present at the organization meeting sending each a copy of the Constitution and By-laws, and urged them to join. Those who did not join on this first appeal were written to again, and each time that letters were sent out, a few more secretaries joined.

A department in the Journal has been maintained. At times it was very difficult to secure an article or articles, but with one exception, every article printed in this department was original, the various Secretaries supplying them.

Many appeals for contributions to this department failed to even bring forth a letter in reply, others brought only promises. I wish, however, to thank the faithful few for coming to my assistance in the discharge of my duties in an office in which no precedent had been established and which was made more difficult thereby.

My report as Treasurer is as follows:

Total receipts for the year ..	$34.00
Disbursements	13.00
Balance on hand,	$21.00

Respectfully submitted,

L. ROSA H. GANTT.
Secretary-Treasurer.

Address by Dr. Edgar A. Hines, of Seneca,—"Reminiscences of a Decade in the County Society."

Dr. Hines gave an informal and interesting talk which was not recorded.

Address by Dr. Walter Cheyne, Sumter, S. C.—"What the Secretaries' Society means to the State Secretary—does it pay?

Mr. Chairman, Ladies and Gentlemen:

I have just a few words to say on this matter, in regard to the question, Does this organization pay?

Now we have had but one year, and we have only had an incomplete organization, but still I think for one year it is a very good nucleus, and from that we must go on to a greater organization.

As Dr. Hines has said, in the conduct of the County Society, we, as Secretaries, should go on and try and get the other Secretaries to work, with just the same ardor, and complete this organization. It has paid in this way: that I came up to this meeting with a better roster, with the names, addresses, and history, as far as I could, of the members than I have ever had; but the card system has not been carried out, except by a few Secretaries. And that is one of the greatest needs now,—that we perfect the history of our members.

We know from the example of the other Societies how difficult this is to get, but if a man will not give it to you, it takes but a little time to go to the County records and get it there. We had an experience with one man in Sumter. He had come from another State, with a "Hip, Hip, Hoorah!" and settled down to improve the Medical profession of Sumter. Dr. Stuckey was in receipt of a request from the American Medical Journal to get this Dr. Blank's name and record, and Dr. Stuckey told him that the Directory people had asked him to send his name, date of graduation, etc. Dr. Blank said "I passed them fellers up long ago." Dr. Stuckey insisted, "But I want the information." Dr. Blank said, "Yes, I know, but I have passed them fellers up."

I propose to turn over to Dr. Hines, in fact I left my stenographer doing it in my absence—a list of the eligible men in the Counties who are not members, and who have been reported. Now there is the material to work on, to increase the number of this Association. You would be surprised to know how many removals there are from the South Carolina Medical Association. They go into Flordia; they go into Texas; they go all about, and these vacancies have to be filled up, if the Association is going to maintain its strength. We have a much better list than we ever had of these members, and it had been my purpose to have it published in the Journal, so each County could see the names of the men who are not members, and try and get them, when they can, where they are eligible. That list has been a help—and it pays.

The Journal this year has not been the help to the Secretary's office that it might have been ,although I made use of it for the first time on account of the money being short, and I saved probably $40 in printing the preliminary program in the February issue of the Journal. The fact is, I think the strength of the organization rests in the Journal, in the County Secretaries, and in the State Secretary, and they ought to be right together. The means of communication from the State Secretary's office can easily be through the Journal, in a great many instances. The replies from the County Secretaries to the State Secretary can be through that Journal, saving money, expense, writing, and double writing. If the County Secretary signs his name to his report, in the Journal, it can be assumed by the State Secretary that that is correct, and as full authority for him to go by in his records.

As a matter of fact, I believe the time will come, from my experience, when the Secretary of the Association, and the Editor of the Journal, shall have one and the same office. It would save an immense amount of money, so far as running expenses go. The communications that come in are repeated to the Editor, and to the Secretary, needlessly very many times, and the combination I believe, in a short time will come, and it will bring these offices together, and closer to the County Secretaries, and that will mean more strength to the Association. I believe if we will all go on working in this way, and keeping the news right before the County Society, in the Journal, it makes the interest so much greater in the whole Association. Why, I have been held responsible because they do not get their Journal, when I hadn't one thing to do with the mailing of that Journal. That shows the marked interest that they have in their paper.

I think it would be a good idea to do as they do in some of the Journals, in having a more personal column for news of doctors, what has happened, and where they go; and the personal items count. So I feel that you are all to be congratulated on this organization.

I think that if you go on and succeed and improve the next year, as the work has been done this year, that we will soon have an organization that will be vastly effective.

Paper by Dr. J. R. Young, Anderson, S. C.

"Does the Work of County Secretary Pay?

(Published in another part of the Journal.)

Dr. O. B. Mayer, in discussing this paper, said that the Society of Secretaries has been of great benefit to the State Association, and their coming together to discuss their work, of great importance, and judging from the amount of work they accomplished one would wonder why the societies have a President, and that it might be of benefit to the County Societies if the Presidents would meet with the Secretaries. He congratulated the Secretaries particularly upon the work they were doing.

Dr. Dwight said that he had great difficulty in getting replies to his letters to the Secretaries in his district, and that he thought every Secretary should answer every letter promptly, and the fact that his letters were left unanswered, made him more prompt in answering letters of others.

The election of officers was here gone into, the following being elected for the ensuing year:

Chairman, Dr. C. C. Gambrell, Abbeville;

Vice-Chairman, Dr. Mary R. Baker, Columbia;

Secretary-Treasurer, L. Rosa H. Gantt, Spartanburg.

Dr. Jervey resigned the chair to Dr. Gambrell, who presided over the rest of the meeting.

The Secretary asked for an expression of opinion about maintaining the Secretaries' department in the Journal, as it could not be carried on without the support of the Society.

Dr. Timmerman stated that by all means this department should go on, as it was very often the best part of the Journal.

It was moved and seconded that this department be kept up, and that the members support it.

The question of monthly reports to the State Secretary came up. Dr. Jervey was of the opinion that it seemed unnecessary to have monthly reports, as some societies only met quarterly, and not monthly. If cards of new members were sent in when they joined, twice a year should be quite often enough for reports.

Dr. Hines was asked what kind of report or card he preferred in his office as State Secretary. He said that he had not had time to think of the matter. It was moved and seconed that he devise some card or blank which would best fill the needs of this office.

EXECUTIVE COMMITTEE.

The Executive Committee for the ensuing year is as follows:

Doctor Harry H. Wyman, Aiken,
Doctor Jesse Teague, Laurens.
Doctor J. W. Burdell, Lugoff.

There being no further business before the body, the Chairman adjourned it, sine die.

DOES THE WORK OF THE COUNTY SECRETARY PAY?*

J. R. Young, M. D., Anderson, S. C.

As a group of county secretaries, we admit ourselves that we do "leave undone some of the things that we should do," and on the other hand, we know better than outsiders that we *do* a great deal of work in trying to keep our societies alive. If the sum total of all the energy put forth by the medical secretaries of South Carolina could be computed in caloris or some unit of energy, would it be sufficient to energize or nourish our various county societies? The condition of inaintion or inertia that hangs or clings to some of our societies must tell the tale. Those poorly attended and listless meetings must denote one of two things—either not enough energy is inserted, or our energy takes the shape of main strength and awkwardness, especially the latter, and intelligent direction is lacking.

*Read before the first Annual meeting of the Society of Medical Secretaries, at Laurens, S. C., April 20, 1910.

Now for a few minutes let us take stock of the condition in our respective societies; let us ponder over the meetings we have had and over those we did not have during the past year, and as our successes and our failures pass in review in our minds, let's do more analyzing and see if we can establish the etiology and cure of those listless, Quaker-like, God-forsaken meetings that we sometimes hold, and label in the Minute-Book, "Regular Meeting of —— County Medical Society."

1. Now about the attendance. Was your last meeting well attended or were only the officers and a handful of the faithful few present? Why were not some of the regular absentees present?

To the members of the Anderson County Medical Society (some of whom are very prone to forget the society meetings,) we administer the following suggestive treatment in Homeopathic doses:

a. At the very first of each quarter, we send to every member a neat printed program for the entire quarter.

b. Three or four days before meeting, we send out a notice of meeting on a postal card and also have notice put in daily paper.

c. On morning of meeting we phone those in reach again reminding them of meeting and any important matters that are to come up.

Thus our members have four reminders sent them, and while our attendance is not perfect, nor indeed is it satisfactory, it is better than it was formerly.

2. At some of our meetings we have a very good attendance but

things drag on, on account of a boresome programme; the subject may not be a suitable one or the reader may not suit the subject. In most of the societies, the program committee consists of the officers so that they are responsible for the nature of the program. By consulting the program of the post-graduate course of study offered by the A. M. A. and by getting a number of programs from other societies, we can select a program that will suit our various societies.

By using the quarterly program, each member is warned several weeks before he is to read a paper, but we here found it a good plan to notify them again a week or two before the paper is due, and if possible, see them and get the promise of the paper. After a fellow actually commits himself he will be less liable to get very busy about the appointed hour of meeting.

Referring to the program again, I want to emphasize the importance of having public meetings once or several times a year. Last year, we had a public health meeting that was quite a success. Dr. Hines, of Seneca, read a paper on the "Importance of Medical Inspection of School Children" and Dr. F. A. Coward, of Columbia, talked on the "Importance of Milk and Meat Inspection." I might add that since this meeting, our town authorities have let the contract for the building of an abattoir and are now advertising for the services of a competent meat and milk inspector.

At our last meeting, only yesterday, we had an enjoyable meeting with our Bar Association, at which we had several instructive talks on Medico-legal subjects. During the next quarter, we will have a joint meeting with our dentists, which we hope will be mutually helpful.

With a little care and forethought those public meetings can be very successful; they have an educational value and it is a very effectual way of informing the public that the doctors of the County are organized and are wide awake on the subject of public health questions.

Now, if the conscientious secretary will plan and execute his work along the lines suggested, it will take a good deal of his time and thought; but if he distributes his work from day to day it will not interfere with his practice. But to the subject of this paper—will it pay the secretary to devote his time and energy to the upbuilding of his society? I dare make the assertion that it will pay most handsomely and the most valuable reward that the faithful secretary will receive is a personal one and relates to his state of mind and heart. It is that spirit of fraternity or good fellowship which he develops for his fellow members. Of course, this reward will not be handed out at the end of the year as a bonus, but it is a thing that grows and its growth is dependent directly on the sincerity and intensity of our efforts. In other words, it has its price, and if we, as secretaries, are to attain this exalted position of a personal friendship and fraternal feeling for our members and are to realize the high ambition of having a united, organized and working Society, we must pay the price in the coin of consistent, honest and intelligent endeavor.

SOCIETY REPORTS.

Abbeville—
Anderson—No report; second month. ,
Aiken—No report; second month.
Bamberg—No report; second month.
Barnwell—No report; second month.
Beaufort—No report; second month.
Charleston—
Cherokee—No report; second month.
Chester—No report; second month.
Clarendon—No report; second month.
Colleton—No report; second month.
Darlington—No report.
Dorchester—No report; second month.
Edgefield—No report; second month.
Fairfield—No report; second month.
Florence—No report; second month.
Georgetown—No report; second month.
Greenwood—No report; second month.
Hampton—No report; second month.
Horry—No report; second month.
Kershaw—No report; second month.
Laurens—No report; second month.
Lee—No report; second month.
Lexington—No report; second month.
Marion—No report; second month.
Marlboro—No report; second month.
Newberry—No report; second month.
Oconee—No report; second month.
Orangeburg, Calhoun—No report; second month.
Pickens—No report; second month.
Columbia, Richland Co.—
Saluda—No report; second month.
Spartanburg—
Sumter—No report; second month.
Union—No report; second month.
Willamsburg—No report; second month.
York—No report; second month.

Abbeville, S. C., May, 6, 1910.

The regular monthly meeting of the Abbeville County Medical Society was held May 6th, '10, in Dr. Neuffer's office. This was decidedly the most interesting meeting that the society has had in the past two years, only three members being absent.

Dr. Black, of Mt. Carmel, presented the only clinical case which was examined by all present.

Dr. Gambrell, of Abbeville, led the discussion on Apoplexy, which was participated in by every one present. This subject consumed so much time that the other papers were deferred until our meeting in June.

The Abbeville society is in a good

healthy state and those who attend the meetings will always derive some benefit.

Dr. D. L. Bryson, a recent graduate of the Atlanta College of Physicians and Surgeons, has decided to locate at Mt. Carmel, Abbeville County.

Wishing you every success with the Journal, I am

Yours fraternally,

C. C. Gambrell.

The Spartanburg County Medical Society held its regular monthly meeting on April 29th, and though the attendance was small the meeting was an interesting one. Dr. G. A. Bunch reported that the patient whom he had exhibited at the last meeting wearing a drainage tube through which had discharged from the pleural cavity for the past seven years two or three drams of pus a day, had been operated on as suggested by those who discussed the case. The wound was closed up and tube taken out, but after a few days patient was in a state of collapse; the tube was then replaced and patient had been doing well since, still wearing the tube and still discharging from it 2 to 3 drams of pus a day. Papers were read by Drs. Wallace and Gantt, the former on "The Early Diagnosis of Tuberculosis in Children," and the latter on "The Status of Tuberculosis in Spartanburg." Dr. J. R. Sparkman was unanimously elected to membership. The Society endorsed the medical inspection of school children, and a committee was appointed to confer with the trustees and the superintendent of the city graded schools and propose some plan by which this work could be done if approved by the trustees.

L. Rosa H. Gantt,
Secretary.

The Columbia Medical Society held its meeting Monday, May 9th, 9 p. m. The following was the program sent out before the meeting:

Subject unannounced—Dr. R. L. Moore.

Goitre—Dr. A. B. Knowlton.

Voluntary Report of Cases.

Papers.

Subject unannounced—Dr. L. A. Griffith.

Voluntary Papers.

Business.

Adjournment.

Report From Charleston County Society.

The Charleston County Society held its regular monthly meeting May 2, at the Society Hall, Roper Hospital. It was one of the best attended of the unusually large meetings which this Society has been having this year. Considerable business was transacted, and after the business session, Dr. Whaley read a paper on The Social Evil, which elicited much favorable discussion and it was decided to give over the meeting of May 16th to the discussion of the subject and the feasibility of preventing its spread. In accordance with this, the following program was arranged for the medical monthly meeting and the principal educators of the city invitied to be present. The Society has lately instituted the custom of having re-

ports on current medicine and surgery read at each meeting in addition to its regular monthly papers and what volunteer papers that may be read.

PROGRAM
of the
Medical Society of South Carolina.

Blindness in Children with Stereopticon Exhibition—Dr. C. W. Kollock, Leader.

The Social Evil—Dr. T. P. Whaley, Leader.

The Social Evil in Gynecology—Dr. Manning Simons, Leader.

The Social Evil and the Cause of Sterility in Women—Dr. Charles M. Rees, Leader.

The Effect of The Social Evil in Obstetrics—Drs. L. Mullaly and J. C. Mitchell, Leaders.

Syphilis and Its Relation to Skin Diseases—Dr. J. Austin Ball, Leader.

Practical Methods for Controlling The Social Evil—Dr. J. C. Waring, Leader.

The Medical Club has been holding its usual meetings every other week and has had a series of most interesting papers presented. One of the most charming and instructive papers ever heard before the Club was presented recently by Dr. Manning Simons. He discussed the subject of "Acute Pancreatitis from a Surgical Standpoint," and gave a most complete resume of the present knowledge of the subject.

The Medical Journal Club is proving a valuable adjunct to the medical and surgical work in the city, in stimulating the reading and discussion of medical journals from various centers both in this country and abroad.

The Journal Club meets in the hall of the Medical Society and has there a table on which a large number of medical publications are kept for reading and reference. This Club has now passed beyond the stage of experiment and has demonstrated its value to its members as well as to the Society as a whole.

Doctors C. P. Aimar and Robert Taft have returned from the meeting of the American Pharmaceutical Convention, Dr. Aimar having represented The South Carolina State Medical Association and Dr. Taft the Medical College of South Carolina.

The Surgeons of the Atlantic Coast Line R. R. will meet at Charleston Wednesday, May 18.

ASE REPORTS.

APPENDECTOMY IN THREE-DAY'S OLD INFANT.

By Dr. S. W. Pryor, Chester, S. C.

My reason for reporting this case is on the account of the age of the patient. I was called to Winnsboro, by my friend, Dr. Samuel Lindsay by phone asking me to hurry down and do an operation for an obstruction of the bowels.

Upon my arrival, I found a three day's old infant with the following history:

Mrs. T.—Age—mother of eleven children, all alive and in good health.

Present labor normal. In fact the child was born before the attending

physician arrived. The mother, however, being cared for by a competent graduate nurse. The child was apparently normal in every way; the excretory organs functionating except the bowels. On the second day the bowels had not moved, and the abdomen became very much distended, so enemata were given which failed to give relief; then 1-20 gr. doses of calomel were tried followed by oil, the oil being vomited each time.

On the third day on account of the child not having passed any gas or fecal matter and being very much distended, the diagnosis of obstruction was made and an operation deemed necessary. I agreed with Dr. iLndsay and we gave chloroform, about 30 m. during the entire operation.

On account of the cord being in the mid line, an incision there was not practical, neither was one over McBurney's point, so I made the incision midway between the two. As soon as the abdomen was opened, it was noted that the intestines were very dark. I passed two fingers around to the left side and found nothing, and after getting around to the right, I found the appendix wound around the ileum and adeherent. I broke up the adhesion, delivered the appendix and treated it as I would any other case.

Before the patient was off the table gas began passing and the bowels moved within an hour.

The 17th, next day, quoting Dr. Lindsay's letter; "The baby was very restless and cried a great deal last night, and this morning Temp. at 6 a. m. 10.4 2-5° F; 10 a. m. 10.4° 1-5°; 12 N. 10.4°; 1 p. m. 10.3 4-5°.

Bowels moved four times, very little distention, passing gas freely, circulation very good, vomited a few times during the night, but on the whole think it is doing as nicely as could be expected."

4-18-10. Still quoting from Dr. Lindsay. "The little patient passed a very comfortable night. Temperature has gradually come down and was 99° at 11 a. m. kidneys and bowels acting very well. Distention about gone. Circulation very good and doing nicely."

The next report being on the 20th as follows: 'I removed the dressing this morning, found the wound in nice condition; ' baby doing nicely, but still has temperature from 99° to 100.° Bowels and kidneys acting O. K. nurses and sleeps well.

The next I heard from the little fellow was on April 24th when Dr. Lindsay was at my office and the baby was quite well.

This is simply reported as a matter of interest, and I would not attempt to say as to the why and wherefore of the cause of this, but it is a very evident case of congenital adherent appendix.

The appendix measured 2 1-2 inches and was about the diameter of a large quill.

Yours very truly,
S. W. Pryor.

NEWS ITEMS.

The eightieth annual commencement of the Medical College of the State of South Carolina was held at the Academy of Music on the evening of May 4, 1910. The exercises were largely attended and the present graduating class was one of the largest in the history of the college. The exercises were opened with an eloquent prayer by Rev. Alexander Sprunt. Following this, the Dean, Dr. Robert Wilson, Jr., read his annual address which will be published

in another part of the Journal.

Immediately following this address came the presentation of the medals and prizes and the presentation of the College Cup, the latter being awarded to the first honor graduate in Medicine, Dr. J. Avery Finger, Jr. The College medal awarded to the first honor graduate in Pharmacy was won by J. M. Duncan, Ph. G.

The valedictories of the Medical and Pharmacy classes were delivered by W. Atmar Smith, M. D., and C. E. Andrews, Ph. G., respectively, and the degrees in Medicine and Pharmacy were delivered by the President of the Faculty, Major Theodore G. Baker.

Dr. Wilson then announced that the following nine doctors were entitled to the position of internes and externes in the Roper Hospital as they stood highest in their class: J. A. Finger, S. R. Lucas, W. Atmar Smith, W. L. Heaner, G. A. Hennies, T. M. DuBose, P. K. Switzer, L. S. Hay and F. B. Sanders.

Those who stood highest in the class of Pharmacy are, J. M. Duncan, L. S. Nettles, W. D. Harrelson, J. H. Wilcox, J. A. Turner and V. O. Hopkins.

The gold medal offered by the South Carolina Pharmaceutical Association for the highest average in practical work was won by S. A. Epps, Ph. G., and Dr. S. R. Lucas, of Florence, won the prize offered yearly for the best report on clinical medicine at the bedside.

The annual address to the graduating class was delivered by Prof. Yates Snowden. We will not publish it here as it appeared in the daily newspapers in full.

Unfortunately, during the midst of the exercises, a thunder storm arose and made it difficult for the audience to hear the addresses. Immediatey following the exercises, the Alumni Smoker was held at the German Artillery Hall, and the following officers were elected:

President, F. Julian Carroll, M. D., Summerville.

1st Vice-President, J. M. Symmes, Ph. G., Darlington.

2nd Vice-President, R. W. Gibbes, M. D., Columbia.

3rd Vice-President, Jos. B. Hyde, Jr., Ph. G., Charleston.

4th Vice-President, F. A. Coward, M. D. Columbia.

Executive Committee.

Chairman, J. C. Sosnowski, M. D.; Joshua Lockwood, Ph. G.; Charles A. Speissegger, Jr., M. D.; G. McF. Mood, M. D.; G. Fraser Wilson, M. D.; McK. Mazyck, M. D.; L. W. Haig, Ph. G.

NEWS ITEMS.

The following editorial and clipping from the Evening Post of May 18th, shows the position of the newspapers in regard to certain phases of the Social Evil and especially shows their willingness to assist in whatever way may be best in the campaign which should be waged against such blots on our civilization.

TO RESTRICT THE SOCIAL EVIL.

The South Carolina Medical Society has inaugurated a most commendable movement for the consideration of plans and methods of restricting the Social Evil. To this end the Society has determined to appoint a committee of fifteen, composed of physicians and laymen, who shall give thoughtful consideration to the whole subject and suggest effective methods of procedure in a

campaign against the evil which is responsible for so much disease and death, unhappiness and suffering in the world.

The physicians are the proper leaders in a movement of this sort. They have knowledge of the consequence of this eveil and they are able to impress the seriousness of the situation. The principal thing needed at the beginning is information as to the widespread evil effects, which is a matter without the knowledge of the majority of even the most enlightened laymen. If the far reaching evil consequences were appreciated generally there would be a stronger demand for some mitigation of the prevailig conditions. The physicians have undertaken to bring this knowledge home to leading citizens, who have the welfare of the community at heart, and their efforts are bound to have beneficial results. As to the methods that may be taken for restriction of the evil after the determination to enter upon the campaign has been reached, that is a matter for very careful consideration. Permanent improvement of conditions can be brought about only by education as to the dangers that control each present and threaten each future generation. It is not a reform that can be accomplished in a few months or a few years, but something can be done towards the great aim every day. How to start and how to proceed is a matter for serious thought, lest mistakes be made at the beginning that increase the difficulties of progress. But a beginning must be made in every community, and it is desirable that general and national movements be organized for this campaign somewhat along the lines of the anti-tuberculosis movement. It is gratifying that the medical faculty of Charleston should be among the first of their profession to take this subject up in a board, comprehensive undertaking to accomplish good by a community effort."

"At the discussion of "the social evil" last night, at the meeting of the South Carolina Medical Society, a movement was inaugurated, having for its purpose the elimination or correction of existing conditions which the doctors pointed out are potent factors in undermining the physical and hygienic as well as the moral character of the people.

The doctors were out in full force, and a number of the professors and male principals of schools, several ministers and others were present by invitation to hear the discussion on various phases of the subject. An extended program of subjects had been arranged for, but all the subjects were not treated. A sufficient number were, however, discussed with stereopticon views in illustrating one of the subjects to allow the physicians to very generally present their views and give eloquent and convincing evidence of the urgency of the need of combatting the conditions and safeguarding the health of the people. The discussion took a wide range. Not only was the subject presented in interesting form in its various phases, but the methods of remedy and correction were reviewed; and along this line, the discussion was lively.

The medical men differed in their opinions as to how the "social evil" should be corrected. Some of the doctors advocated the European view, which met opposition on the grounds of "morality." The doctors did not, however, attempt to conclude the

matter last night, and after protracted discussion, it was finally decided to refer the subject to a committee of fifteen, in accordance with the following resolution, offered by Dr. Louis D. Barbot: "Resolved, That the president of the association appoint a committee of fifteen, of which he shall be chairman, composed of physicians and laymen, whose duty it shall be to devise means, to combat the so-called "Social Evil."

Among the physicians and surgeons who spoke were: Drs. T. P. Whaley, C. W. Kollock, A. J. Buist, Manning Simons, Charles M. Rees, Lane Mullally, W. P. Cornell, Louis D. Barbot and Frank Johnson. When the doctors had pretty generally concluded their discussion with the medical side of the matter, several of the invited guests were asked to give their views and the following spoke on points, raised in the discussion: Rev. Dr. C. Armand Miller, Principal W. M. Whitehead, of the High School, Prof. W. K. Tate, Mr. T. R. Waring and Prof. P. M. Rea.

The meeting proved an interesting session, and is expected to launch a movement which will bring good results to Charleston. The movement has only now been begun and its results will become patent with the passing of time.

The Increasing Frequency of the Use of Narcotic Drugs by Members of the Medical Profession and the Probable Reasons for it.

By W. C. Ashworth, M. D., Greensboro, N. C.
Resident Physician—Telfair Sanitarium.

The average physician is not aware of the appalling extent to which the members of our profession are addicted to the use of narcotic drugs. My line of work gives me ample opportunity to notice the increasing evil to a greater degree than is imagined or even thought of by the general practitioner or layman. We find on looking over our case register that 75 per cent. of all our drug patients are physicians. This per cent. is perhaps a little larger than is found in the average institution, which may be accounted for in part, by our direct method of advertising to the profession; however, we do not believe that it is much larger than is found in most institutions.

I wish to note briefly the causes which are responsible for this evil which has befallen so many of our medical brethren. It is an evil which is enslaving a large and increasing percentage of the best men in our profesion.

The first and leading cause we ascribe to the meager teaching in our medical colleges of the baneful effects of the habitual use of narcotic drugs. The average medical student leaves college with but a slight idea of the insidious action of morphine and cocaine or the easy avenue which leads to the contraction of the habit. If the students of our medical colleges were well grounded in this important branch of medicine, it would not only perhaps be their own salvation, but would also in a measure stop the indiscriminate prescribing of narcotic drugs to their patients. Among the questions to the physician entering our institution for treatment, he is asked how he contracted the morphine or cocaine habit, and he almost invariably answers, that he commenced its use for acute pain or for the relief of fatigue caused by overwork, not realizing any more than

the average layman the insidious action of the drug. I regard it as a great stigma on our profession that such a condition of affairs exists, but on the other hand, I hold that the unfortunate habitue is less blameable than his teachers, whose duty it was to have given him more information on a subject that so widely concerned his future success in the most trying of all professions.

Now as to the remedy, again I would suggest that a special course of lectures be given each class of medical students on the narcotic drugs and their habit-forming tendencies in order that the student may leave college and take up his work with a clear and concise knowledge of the action of these drugs and know that if they are habitually used they are a constant menace to the life and mentality of the user and that sure and certain dire results must inevitably follow in their wake.

The laity have a very little patience with the physician who is addicted to the use of drugs. They say at once, that he above all others is inexcusable, because he knew the action of the drug before commencing its use. I am sorry also to note that the members of the medical profession have about as little patience with the habituated physician as the average layman has. Now the remedy lies in the proper teaching of this subject in our medical colleges and secondly with the individual himself. The physician must not entertain the idea that he is immune to the temptations of other people or that his will-power is of a superior nature to that of his layman brother: per contra, we generally find just the reverse of this condition of affairs. On account of his irregular hours and the constant grind on his nervous system, incident to his laborious profession, he is really more susceptable to the action of narcotic drugs and the relief from worry and overwork is more quickly sought, before he even realizes the danger and subtleness that lurks in the use of these drugs.

In defense of the unfortunate drug user, I wish to say that very few of them commence the use of the drug wantonly. Somewhere, perhaps in the ancestry of the individual, you will find the history of excessive use of stimulants or narcotic drugs, thus transmitting to the unfortunate subject a lessened resistance or a strong predilection for the use of stimulants and drugs. I find in support of this argument that fully 50 per cent. of my drug patients give a history of a depraved ancestry or other faulty habits of living, due in a large part to the excessive use of narcotic drugs or stimulants. It is natural therefore, to find the neuropathic type or tendency in most drug users.

I wish, in this connection, to reiterate what I stated about physicians taking narcotic drugs without any more knowledge of their habit-forming tendencies than the average layman and to this is added the constant danger of these drugs on account of their being handled daily by the physician, which places him in infinitely more danger than the average layman. When we realize fully the force of this truth we become more sympathetic and have more patience with the unfortunate physician who becomes addicted to the use of narcotic drugs.

Most people who handle explosives have received instructions as to their danger and certain precautions are given for their use, but not so with the physicians who daily handle narcotic drugs, which are even more dan-

gerous than the most deadly explosive. The physician leaves his alma mater with the fixed belief that he can handle and perhaps take a medicinal dose of any drug with impunity and that he is or can always be master of the situation. This belief, perhaps, continues until he has taken a few doses of morphine during some acute illness for the relief of pain, for which time and rest would have been sufficient, but unfortunately he could spare neither, and when the illness has subsided he suddenly wakes up to the fact that it is impossible for him to live without the powerful anodyne and realizes as never before that there is no such slavery as the thralldom of a drug. Try as he may, to break the fetters that bind him he finds himself utterly helpless and wholly unable to cope with the situation. There is an old adage that a habit soon becomes second nature, but when it comes to the use of narcotic drugs it stands first and nature is in abeyance and all the forces of the body are insufficient to throw it off.

I wish to emphasize again, in view of the deporable condition of affairs, that the failure of our medical teachers to teach every graduating class in medicine the insidiousness of narcotic drugs whether they be taken by the doctor himself, or given to his patient, is well nigh criminal. When the physician learns this lesson well as he should, he will cease to give so much to his patients and consequently we shall have fewer morphine habitues among the laity. As an illustration of this point, I frequently elicit a history like this from a patient who is just entering for treatment. When questioned as to how he contracted the habit, he states he was sick and the doctor visited him once a day perhaps and administered a hypodermic for a period of days and possibly weeks, and when the illness subsided, the physician in attendance stated it would not be necessary to give any more hypodermics and by all means not to take any more himself. What happened? The patient writhes in agony when his accustomed narcotic is withdrawn and he forthwith sends for his regular medical adviser and is informed by him that the pain is largely imaginary and that there is really no necessity for his continuing the anodyne hypodermic. The poor patient implores and beseeches his doctor just for one more, but is stoutly refused. What is the result? The patient leaves his bed, if he is able, but if not, sends to the nearest drug store and arms himself with a hypodermic for future use. The future of this patient need not be pictured as he now belongs to the great rank and file of morphine users. Who says the poor fellow is to be blamed? Who is to be blamed most, the patient or his ill-informed medical adviser? I tell you gentlemen, we deal entirely too lightly with this question. Something must be done and that quickly, or we shall become a nation and a profession of drug users.

To my mind, the solution of the problem is to educate the physician himself, who will in turn save himself, as well as his patient, from the clutches of the 'king' of all drugs, morphine. If I have succeeded in arousing your interest concerning this very important subject I shall feel more than repaid for the time spent in writing this hastily prepared article.

Dr. A. Fraser Wilson recently had an unfortunate and painful accident fracturing his right forearm while starting his automobile.

BOOK RECEIVED.

"The Propaganda For Reform, and New And Nonofficial Remedies published by the Journal of the A. M. A. These two valuable publications need no notice in this Journal. They are too well known to the profession to require any introduction here. They should be on every physician's desk and should be frequently used for reference. It is only a pity that they are not bound in such form that they would be kept as a permanent record of the good work done by the profession.

Conquest of Disease Through Animal Experimentation by James Peter Warbasse—D. Appelton & Co.

This is an interesting little book which would be well worth reading by any one who is interested in the subject of animal experimentation. It answers the hysterical outcry against vivisection and vaccination admirably, and would serve to enlighten many who, through ignorance, set up an outcry against this method of study which has done so much for the world within the past few years.

CURRENT LITERATURE.

H. G. Wetherill, M. D., of Denver, in the Journal of the American Medical Association, May 7, 1910, advocates more care in the use of hypodermic stimulation during and after surgical operations. He claims that more damage is done by over-stimulation than by under-stimulation. That occasionally, the balance has been turned against desperately ill patients by a course of injudicious and irrational hypodermic stimulation. Says that careful diagnosis and accurate estimates of the ability of the patient to undergo the operation should be made. The preparation of the patient, selection of the anesthetic and of the anesthetizer are most important in the prevention of shock. That after an operation, the patient should be placed in a favorable position in a warm bed, watched by a competent nurse *and left alone.*

No strychnine, no spartein, no digitalis, no nitroglycerin, no whip and spur for a tired and jaded and played-out and overworked heart, if such he has. No piling up of new poisons to impose additional burdens on the organs of elimination.

In conclusion, he quotes from H. W. Smith, M. D., on *Surgical Shock,* conclusions as to the effects of various drugs often used in the treatment of shock.

A NEW AND QUICK METHOD FOR SPIROCHETES (TREPONEMATA) IN SMEAR PREPARATIONS.

Albert A. W. Ghoreyeb, M. D., Boston, Mass.

In the Journal of the American Medical Association, May, 7, 1910, Dr. Ghoreyeb gives a brief outline for staining Spirochetes and in his method the following solutions are used:

1. One per cent. aqueous solution of osmic acid.

2. Liquor plumbi subacetatis, diluted 100 times with distilled water.

This diluted solution should be freshly prepared.

3. Ten per cent. aqueous solution of sodium sulphid.

A thin smear is preferable. No heat fixation is necessary.

The smear is stained as follows:

1. Cover with osmic solution for thirty seconds.

2. Wash in water.
3. Cover with lead subacetate ten seconds.
4. Wash in water.
5. Cover with sodium sulphid solution ten seconds.
6. Wash in water.

ANIMAL EXPERIMENTATION IN RELATION TO OUR KNOWLEDGE OF SECREIONS, ESPECIALLY INTERNAL SECRETIONS

S. J. Meltizer, M. D., New York. Journal of the American Medical Association, May 7, 1910.

In this issue, Dr. Meltzer concludes his interesting account of the results of animal experimentation and takes up the facts established. He covers several of the various internal secretions and distinguishes between an internal secretion and a waste product. After giving a summary of what has so far been developed from his study and experimental work, he gives a resume of the lessons taught by this branch of medical and scientific work. We recommend the reading of these articles which have been appearing in the Journal of the Am, Med. Association, especially in view of the insane agitation against vaccination and vivisection which has made many papers foolish in the hysterical agitation over a matter of which they knew nothing.

From Journal A. M. A., May 7, 1910, excerpt from Reforma Medical, Naples, March 21st.

The Campaign Against Malaria in Italy—Rummo states that there is considerable discussion in Italy now as to whether quinin should be taken systematically as a preventive in malarial districts, some advocating compulsory prophylaxis by this means. In order to determine whether long-continued preventive doses were injurious, extensive experimental and clinical research has been under way in his clinic, some of which has already been mentioned in The Journal. The results seem to show, he says, that small doses of quinin can be kept up for six months at a time without harm, especially when given by the intermittent method, that is, 1 gm. (15 grains) twice a week; this allows time for recuperation between the doses, and it is also more convenient. The quinin prophylaxis, he declares, should be systematically applied in every hot-bed of malaria. He regards persons with latent malaria as the most dangerous for the community and insists on the importance of thorough, persistent treatment in every case until the patient is absolutely cured. He adds that man and the mosquito are not the only elements in malaria; undrained land is the fixed and potent factor which renders all other measures comparatively futile. Until the marshes are drained, he says, the campaign against malaria in Italy will never prove a complete success, and to this end efforts should be mainly directed.

Action of Long-Continued Quinin Doses on the Kidneys.—Ferrannini reports experimental and chemical research which has demonstrated that quiinin in small doses even continued over months, does not injure the kidneys seriously, but after several months the kidneys seem to yield more rapidly to external influences, responding more rapidly with albuminuria, etc., to factors which would not affect the sound kidney. Microscopic examination of the organs after several months revealed further certain lesions in the

secreting portion of the kidneys. His practical conclusions are that long-continued, small doses of quinin may be regarded as harmless unless administered longer than several months.

Quinin Prophylaxis of Malaria. —Celli presents various arguments based on clinical and experimental data to sustain his assumption that epidemic malaria is the result of the infected human being plus the anopheles, plus three unknown quantities, x, y and z—x representing the predisposing or immunizing biologic factors, y the physical, and z the social factors. The great lack at present, he declares, is a means to diagnose latent malaria; the apparently healthy hematozoon-carriers are a free quent source of contagion. He remarks in regard to the discouraging inefficacy of quinin in chronic malaria, that every effort should be made to prevent the disease from getting into this refractory chronic stage Prophylactic doses of 0.3 gm. (5 grains) of quinin every day will ward off malaria, he says, and at much less expense than it can be cured. He lays great stress on the importance of drainage and cultivation of the land in the malarial districts, and also on the varying severity of malarial infection at different times and in various places, compelling individualization of the dosage. In localities where the malaria is mild, treatment of each patient may suffice, with preventive administration of quinin in the families attacked, but if the epidemic is severe, the quinin prophylaxis should be made general and supplemented by the mechanical measures —screening, etc., especially when non-immunes are staying for a short time in malarial regions.

THE RELATIONSHIP BETWEEN THE THYROID AND PARATHYROIDS.

By Jasper Halfpenny, M. A., M. D., C. M.

Journal of Surgery, Gynecology And Obstetrics, May, 1910.

In the May Journal on Surgery, Gynecology And Obstetrics, Dr. Jasper Halfpenny calls attention to the growing interest displayed by the surgeons of today to the relation ship between the thyroid and parathyroids. He says since the re-discovery of the parathyroid glandules by Gley in 1893, great interest has been taken in these organs, that the majority of physiologists and pathologists hold to the view that the thyroid and parathyroid are two separate and independent organs and that this independence is both anatomical and physiological. Recently, however, views very like those held by some of the earlier observers have been revived. These observers, without denying the possibility of a certain degree of functional independence belonging to thyroid and parathyroid respectively, are nevertheless strongly of the opinion that there is a definite physiological relationship and that in many ways they may be looked upon as constituting a single piece of apparatus.

These and many other attempts at making a practical application available led to a series of experiments, the interesting results of which are given in the Journal.

IMPORTANT NOTICE.

Those of our readers who are interested in the various forms of physiologic Therapeutics (including Hydrotherapy, Electrotherapy, Massage, Hyperemia, etc.) will be glad to know that is proposed to shortly inaugurate a new journal devoted solely to the delineation of the progress made in these lines of therapeutic endeavor.

The American Journal of Physiologic Therapeutics will be published bimonthly and the subscription price will be $1.00 a year. The names and address of all interested physicians should be sent in, and those desirous of subscribing at once may enclose their remittance when writing. It is to be hoped that a wide-spread interest may be aroused in this matter. Write now, while this is fresh in your mind, to The American Journal of Physiologic Therapeutics, 72 Madison St., Chicago.

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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. J. C. SOSNOWSKI, Editor.

VOL. ~~X.~~ 6 JUNE, 1910. No. 6

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

Business communications relating to subscriptions and advertising should be addressed to

JOURNAL S. C., MED. ASS'N., CHARLESTON, S. C.

A REPORT OF AN EPEDEMIC OF BERIBERI,*

Occuring at Convict Stockade, Ten Mile Hill, Charleston County.

Early in March just passed there developed in the short space of a fortnight seventeen cases, which were diagnosed Beriberi and sent to the State Penitentiary as unfit for work on the county roads, and as possible sources of infection to the remaining fourteen prisoners. They presented about the following picture: An oedema, starting in most cases about the calves of the legs, with some pain, numbness and paraesthesia in this region. The oedema was not of the boggy type, but seemed resistant to pressure, and extended rapidly until, in the most marked cases, it had involved thighs, abdomen, scrotum, front of chest and face. The onset was accompanied with a general feeling of lassitude, rather than a distinct malaise. Temperature, normal. Urine, negative. The more advanced cases had accelerated pulse, or a pulse which, after the least exertion, would reach 120 and over. These cases showed a dilated heart and it was hard to distinguish the heart-sounds. Relative murmurs and venous pulsations in the neck were observed. The gait was tired, slow and dragging, but no ankle-drop or wrist-drop. Knee-jerk diminished or lost. In one case noted it was increased. Hook-worm ova found in two out of three cases examined. No other intestinal parasites noted. One-half showed

*Read before the South Carolina Medical Association at Laurens, S. C., by Dr. A. J. Jervey of Charleston, S. C., April, 1910.

white fur coating on tongue. There was a general tendency to constipation.

As these cases were made subjects of close investigation by State and Government physicians in Columbia, I will not go more into the clinical phenomena they presented, but will devote my time attempting to answer two questions that naturally suggest themselves, viz: Is Beriberi a new disease here; and what is the source of infection?

The first of these I am satisfied can be answered in the negative. My proof is far from complete, as sufficient time has not elapsed since I recognized the disease for me "to produce my Esquimo," or, in other words, to prove beyond question that Beriberi is and has been an endemic disease for many years in the low lands of our State.

For two years I have attended the county chain-gangs in Charleston, and during that time have seen three distinct outbreaks of what I now know to be Beriberi, numbering in all over thirty cases. In talking with the physicians who attended the stockades before me, and in looking over their weekly sick reports, I find that there were numerous and undoubted cases of Beriberi, called by various names, such as "Malaria," "Acute Nephritis," "Cellulitis of Legs," "Myositis," "Undiagnosed," "Swollen Limbs" and "Dropsy." Several years ago four deaths were reported by the stockade physician at one of our medical society meetings, and it was suggested at that time the disease might be Beriberi. The first cases I saw occurred in July, 1908, when the gang was in camp at Otranto, about six miles beyond the present location. One case in particular was very anaemic, and finding hookworms, I gave them thymol and iron, which seemed to bring about marked improvement. I overlooked the fact that the camp was broken up and the gang moved at this time into the present stockade, which probably had more to do with the recovery of these cases. In July, last year, five cases went to Columbia. The week following this three new cases developed. In September and October two deaths occurred; the first from oedema of the lungs, as the immediate cause. The second died rather suddenly, probably from involvement of the Vagus. He had been complaining only a few days, had oedema and pain in the calves of legs, but did not stop work. Careful post-mortem on him revealed only an increased amount of fluid in pericardium and abdomen.

Dr. Pope, the former physician to the penitentiary, and who is a most careful observer, on seeing these cases in Columbia last month, recognized the condition as identical with many cases that used to come up from the phosphate fields during his service, and which were spoken of then as "Phosphate Sickness." Coming from Dr. Pope, this a most significant observation.

In attempting to answer the second question. "What is the Source of Infection," a brief description of the Stockade and of the diet and life of the convicts will be in order. The location of the main building is on a dry, sandy elevation, fifty feet above sea-level, and well drained. It runs due east and west, and measures 120x35 feet. This is divided into two unequal parts for the convicts and white guards. That portion occupied by the convicts is 80x35. The ceilings are high, and there is a two-foot ventilator running the entire length of roof, windows every twelve feet, and screened throughout. The very heavy flooring boards lie immediately upon the sand beneath. The flooring in the guards' side is elevated two feet. Flush closets and shower bath are provided. In winter the place is heated by means of two

large wood-burning stoves. A good and bountiful supply of rations is provided, consisting of fresh and salt meats (butts), hominy, corn-bread, a good grade of molasses and white beans, but no rice. The only water used at all on the place, or for drinking purposes while on the works, is Goose Creek, the same that is used by the residents of Charleston. The average number of convicts is about thirty. Among the guards, who number six, there has never been a case.

Many theories have been advanced to explain the mode of infection in this disease, but until more is known about the cause, they must remain theories. The rice theory, advocated by Takagi, and having many firm believers, is seen at once in this epidemic to be fallacious, as rice is entirely excluded from the dietary of the convicts.

Whether it be due to a germ or only a toxin, and if a toxin, whether created within or without the body, should furnish a lively discussion, but when it is all over and the final analysis reached, you might well ask, "What is the answer?"

That it is a ground or soil infection seems to suit this particular epidemic better than most other theories. Manson says heat and moisture are two essential factors in the production of Beriberi. From my brief description of the Stockade I have tried to show that neither of these predisposing factors are here operative. Then where shall we look for these? Let's see where the gang was working prior to these outbreaks. One portion of the gang is known as the road gang, being composed of the more intelligent negroes, because they must handle animals and the road machines; the other portion are concerned with the drainage work chiefly, and their duty it is to be ditching in water of various depths in the low, foul bottoms that need drainage. The convicts first attacked in each outbreak, it was noted, belonged to the ditching gang, and further than this it was noticed that the symptoms appeared always about six weeks after an exposure to some very suspicious and foul piece of ditching. Six weeks, according to Manson, being the briefest time after exposure for symptoms to develop.

As regards personal infection, the authority before quoted says: "The hypotheses based on the belief that the disease spreads from man to man are constructed on analogies with other known diseases, and particularly with Diphtheria. Though the nerves affected differ to some extent in Diphtheria and in Beriberi, the nerve changes are, according to Hamilton Wright, practically identical in the two diseases. As might be anticipated, careful search has been made for some primary lesion, even if only of a trivial character, to correspond with the throat condition which precedes diptheritic paralysis. The gastro-duodenal condition, considered by Wright as the primary lesion and the pharyngitis suggested by Durham are too inconstant. No constant lesion has been proved to precede the neuritis, and there is no antecedent lesion or definite condition which enables us to predict the onset of the paralytic we know as Beriberi.

"The present state of our knowledge only admits of the following conclusions: That the real causal agent is capable of transmission by man from place to place; that when introduced into a healthy community, such as the inhabitants of a jail, the disease spreads to a limited extent only, until fresh cases be introduced; that though close attention to hygienic conditions, especially to diet may further restrict, it does not prevent this spread; that the disease is not conveyed by air or for any distance by water, and that there is no satisfactory

evidence that it is spread by faecal contamination of food or water; that the disappointing results of disinfecting dwelling places is opposed to the opinion that the disease is spread by inhalation; that no gross lesion is a constant precursor of Beriberi, and therefore if the cause of the disease be a micro-organism, vegetable or animal, it must be one that produces the neuro-toxin without giving rise to any marked or constant local lesion, or affecting the general health; that it would thus resemble some other diseases due to nerve poisons in which the primary lesion may be insignificant or imperceptible, as in some cases of tetanus. If it be assumed that Beriberi be a germ disease and that this germ is introduced into the body, it may be that it produces the characteristic lesions by means of a poison elaborated in the blood or in the contents of the alimentary canal."

BERIBERI.

BY F. W. P. BUTLER, M. D.,
Surgeon and Physician to S. C. Prison, Columbia, S. C.

On the 29th of March, 1910, fifteen convicts from the chaingang, Charleston County, South Carolina, were admitted to the general hospital of the South Carolina Penitentiary. One of the prison guards, who came with the prisoners from Charleston, said the prisoners were suffering from what they called Beriberi. I immediately began to investigate the subject in the books and soon found that the picture the books presented to my mind was exactly what I had demonstrated in my patients. Not having seen such case before, I called up Dr. J. D. Long, Past Assistant Surgeon in the Marine Hospital Service of the United States. He was "tickled to death" over it. He soon came to the prison and brought with him Dr. Fred Williams, Secretary State Board of Health of South Carolina, and after some further investigation of the cases, we all decided they were typical cases of Beriberi, some of the wet or dropsical type and some of the more acute types—not so bad off. Would say that Dr. Long had had extensive experience with the disease while on duty in the Philippine Islands, and Dr. Williams also, in the volunteer army of the United States. We find the true derivation of the word, beriberi is uncertain as far as I have been able to discover. As I said above, eight of the cases admitted to the Hospital were bad off; the other seven not so serious. On examination, physicial, we noticed anemia in all, effusion of serum all through the body, mostly in the extremities in two, the most pronounced cases of anasarca involved the entire body, and especially in the penis and scrotum. Precordial anxiety, pain in legs posterior principally to the knee-joint; anesthesia was marked in the legs, in some cases circumscribed. In the non-dropsical cases the knee reflexes were markedly demonstrated, and very slight in the dropsical. In some cases we noticed the drop-ankle symptoms slightly. We found pain on touch in the lumbar region. Locomotion was strikingly like the illustrations shown in Manson's book on Tropical Diseases. The heart was functionally affected in most of the cases, and markedly so in a few. Dilatation we decided to be the trouble.

History of the cases is given by the patients, and upon such histories we depend in diagnosing and treating all cases. It was that they had been working in water and mud all the winter; in water

up to their knees and above, and that they became sick about a week before they were transported to the prison. The sickness began by numbness in legs, and gradual filling up with dropsical effusion. They had been fed on hominy, cornbread, butts meat, beans on Sundays, and rice on Christmas, and had been given Goose Creek water, brought to the Stockade by a pipe, in its original state—unfiltered. They claimed that they had gotten no vegetables other than the beans on Sunday; also had been given beef (tainted) one or twice a week. Therefore, these causes, as stated from the history of their present trouble, led up to their condition—Beriberi.

Now which of the various causes help to produce this condition, and which was the real causes I am unable to say, but I am certain the mental and physical strain in vitiated soil and water, the sameness of diet, the bad drinking water, all combined, produce in them this pitiful condition found when admitted.

Dr. J. D. Long, who is stationed in Columbia making a thorough scientific investigation of Pellagra, very kindly asked me to collect specimens of urine for examination. We went through a careful chemical analysis of the urine in his laboratory, and found them all negative but three cases. In one we found a slight trace of albumin, and in two slight traces of sugar; otherwise they were all normal.

The next request Dr. Long made was to collect faeces from each patient, which I did, and by the miscroscope the true condition was seen in every case; we noticed absolutely undigested material of all kinds, as well as the round worms, and bacteria swimming around.

FIRST POST MORTEM.

Sam LaBoard, aet. 16, the youngest one of the patients, died on 31st March, 1910, in great agony: pain in abdomen, etc. On April 1, 1910, we did a post mortem on him and found the following condition:

Autopsy: Flocculent fluid in abdomen; intestines congested; liver slightly enlarged, fatty degeneration. Lungs: Plural effusion. Hypostatic. No adhesions. No tuberculosis. Gall bladder full; no destruction seen; spleen enlarged; hard, adherent to mesentery and parietal peritoneum. Kidneys: normal in size and color; small hemorrhages; parenchymatous nephritis; pancreas cirrhotic and congested, and adherent to spleen. Ulcers in splenic flexure of colon; large bowel congested and ulcerated. Heart: pericardial effusion. Heart R. V. dilated. Heart L. V. thin and small.

SECOND POST MORTEM.

Charley Williams, aet. 22; 4/2 died. Lungs: Pneumonia (lobular in stage of hepatization—float in water. Liver: Hypertrophic cirrhosis with fatty degeneration. Spleen; Chronic inflammation of spleen, pulp firm. Pancreas: Small and hard. Kidneys: Normal in size and color; parenchymatous nephritis. Appendix: Long, otherwise normal. Intestines: Congestion descending colon; chronic enteritis well nigh throughout; Mesenteric glands: Enlarged and hard.

At present all my cases are improving. The dropsical effusions have disappeared in three cases, and they are all better. In one case with decided dilatation heart, the left lung in a few days began to become engorged, spitting blood, and much distress. The lung was, on physical examination, full of bubbling, moist rales. These most unfavorable symptoms were relieved by the application of a large old-fashioned fly blister, which remained on eight hours and gave the sufferer great relief. It took well, and the serum is still (now three days) oozing through the

skin. The patient was also given belladonna until his throat became dry; also whiskey was administered every two hours.

In these cases I have been struck with the absence of symptoms of malaria. Only two of the cases have had the slightest rise of temperature, and one died, as stated above, from pneumonia. He, of course, had a rise of temperature. The other case, the slight rise was of a temporary character. In most of them I noticed the scorbutic element due most likely to a want of vegetable diet.

On receiving these cases, the first thought that came to my mind in regard to treatment, was that I would adopt the eliminative treatment, so I began with a brisk mercurial purgative, followed by salts in good doses, which I have kept up ever since. I was right in the treatment, because the examination of the faeces demonstrated to our minds that the patients were suffering from auto intoxication, the main cause of most of the troubles that beset mankind.

Dr. Long suggested tinct. nux. vomica three times a day. He thought this tonic stimulant braced up the muscles of the disturbed heart, etc. With this I also gave digitalis and strych. cactus, etc., in pill form. These pills and the salts have been discontinued and they are now on a liberal diet, which has been kept up, and now they are taking small doses of calomel and nux. vom. The calomel is being given for its beneficial effects on the kidney and liver. The removal from the cause of the trouble to my mind has been the main factor in the rapid improvement of the patients.

Will say, in conclusion, that Dr. J. D. Long, who has been of invaluable assistance to me by his cool intellectual skill and ability, will make a more scientific report of the cases to the authorities which he so ably represents. Dr. Fred. Williams, with the aid of the distinguished Dr. Babcock, has taken full and complete notes on conditions as they found them, and Dr. Williams, as an officer of the State Board of Health, will give in a more able and scientific way, a report of the cases.

I wish to thank all of the Columbia physicians for their aid in examining and assisting in the welfare of my patients.

APPENDICOSTOMY.*

BY H. R. BLACK, M. D.,
Surgeon Spartanburg Hospital, Spartanburg, S. C.

Of the several methods that have been devised for irrigating the large bowel from above downward, Appendicostomy is the most popular one at the present time. The operation is now about eight years old. It consists in fixing the appendix in an abdominal opening, amputating its end about three-eighths of an inch from the skin from forty-eight to seventy-two hours after the operation, then passing a soft rubber catheter through its lumen into the large intestine and flushing the same. It is perhaps the most successful plan of treatment yet devised for the relief and cure of chronic diarrhoea, amebic dysentery, mucus colitis, etc.

In 1893 Mayo Robson opened on the side and cured an obstinate case of colitis by establishing an artificial anus in the colon. Two years later, 1895, Keith and Hale White reported cured cases of chronic colitis by colostomy, and still later a case of amebic dysentery was re-

*Read before the South Carolina Medical Association, in Laurens, S. C., April 20, 1910.

ported cured by Murry, by establishing an artificial anus in the head of the colon, their idea being to divert the fecal stream from the large bowel and to free the mucous membrane from irritation, and to give the colon rest, but it was afterwards discovered that the cures came from the bowel irrigations. The next most advanced step was that by Gibson, who suggested a small incision in the longitudinal band of the large bowel, the insertion of a soft rubber catheter and the introduction of two or three tiers of Lembert Sutures in the serous surface of the gut, so as to invert the latter and to form a sort of teat or valve-like projection into the caliber of the bowel to prevent the involuntary escape of fecal matter and a possible infection. The idea was put into effect by Bolton, in 1901. But Robert F. Wier, of New York, was the first to utilize the appendix for irrigating purposes. In April, 1902, he opened the abdomen with the view of doing a valvular cecostomy, but the idea of irrigation through the lumen of the appendix suggested itself as it rose prominently into the wound. "Appreciating its value for irrigating purposes, he dragged it through the wound and stitched it to the skin and closed the wound around it. Having anchored it he was struck with the idea that the appendix might not be patulous, and he therefore amputated its tip and introduced a number 12 soft rubber catheter through its lumen into the bowel." Two days later the colon was irrigated and thus began the treatment of amebic dysentery through the vermiform appendix.

Dr. Willy Meyer, in the same year, October, repeated the operation for syphilitic ulceration of the large bowel and suggested the name, "Appendicostomy."

Monynihan, of Leeds, was the next to do the operation, who reported cured a case of muco-membranous colitis. In 1903 Dawbarn operated on a similar case, and 1905, Tuttle, of New York, reported cured a case of amebic dysentery by Appendicostomy. In 1905, in a second paper, Meyer reported a case of amebic dysentery cured, also a case of tuberculous ulceration of the large bowel much improved by colonic flushings followed by the instillation of the emulsion of iodoform through the appendix. He also mentions two cases of syphilitic ulceration of the colon that were much benefitted by irrigations and constitutional treatment. But C. B. Keitly, of London, has done more perhaps to develop and to broaden this plan of treatment than any other operator. On different occasions he has contributed papers in which he refers to amebic dysentery, mucous colitis, acute hemorrhagic colitis, obstinate constipation and acute intestinal obstruction treated locally through the appendix. Both Tuttle and Gant, of New York, have had large experience with the treatment of the large bowel from a surgical standpoint, both of whom are favorable to appendicostomy for the relief of mucous colitis, amebic dysentery and chronic discharges from the colon. Gant, however, in certain cases where the small intestine is involved, prefers cecostomy. He opens near the ileo-cecal valve and irrigates both the large and small intestine at the same time by a specially devised instrument of his own.

It is worthy of note that Chas. A. L. Reed, of Cincinnati, in the March number (6th) of the Association Journal, in which he discusses the relative value of cecostomy and appendicostomy, prefers the former, all things being equal. Speaking of the anatomic facts, he says: "It is a matter of some significance that the large pouch of convolution of the intestinum ceceum is the part that lies in direct contact with the anterior abdominal wall; that consequently, (b) it is

from an inch to two inches nearer the parietal peritoneum than is the base of the meso-appendix; and (c) that it occupies a position directly opposite the valvula coli, a matter that I shall show to be of practical importance." He further states that the lumen of the appendix vermiformix is of variable diameter, and in certain cases is entirely obliterated; that the cycle-shaped fold of mucus membrane, the valvular process of vermiformix at its cecal orifice of the appendix is sometimes absent; that the meso-appendix is of variable length and is relatively inelastic, and that the wall of the appendix proper is of variable thickness and is but poorly supplied with elastic tissues, etc."

He also says: "The proximity of the presenting pouch of the cecum to the parietal peritoneum permits of its fixation in the operation wound practically in situ naturalis; it can be utilized for a large one or a small one, as may be indicated; it permits an opening through which a catheter may be passed at any time through the valvular coli into the small intestine; it is free from undue tension after fixation, thus avoiding the possibility of breaking up the anchorage prematurely or causing painful adhesions following the operation, and if properly managed it is more liable to be the source of fecal infection than is the appendix. On the other hand, the remoteness of the appendiceal base (a) makes its fixation not infrequently a source of painful tension, which, with the presence of its walls by a catheter, causes (c) the whole appendix, relied on as a tube to perish. As a matter of fact, the majority of appendices do perish within a day or two after operation, leaving (d) the remaining condition one of cecostomy with an opening at an undesirable point, the adhesions resulting from appendicial implantation are indeed very frequently painful, owing to the constant traction, thus making a secondary operation necessary." Reid's argument is very plausible; but Appendicostomy is by far the most popular surgical procedure at present for through and through irrigation of the colon. Gant, of New York, also says that the appendix is liable to become necrotic in some cases, and that it may slip back into the peritoneal cavity from post-operation vomiting, and he reports a death that occurred from a slough in the head of the colon.

In doing appendisectomies, I have seen a goodly number of appendices that could not have been catheterized. Tuttle, however, has reported two cases where the appendix was small and atrophied that was easily dilated with better results than large appendices. G. B. Keitly was able to dilate a small slender atrophied appendix in a case of carcinoma of the transverse colon until he was able to introduce a small size rectal tube, the opening afterwards serving as an artificial anus. From the experience of different surgeons, it is therefore necessary that every operator be prepared to treat each case upon its own merits. If the appendix be too small or short, strictured or firmly bound down by adhesions, or unfit for irrigating purposes from any cause, the ideal operation and the one of choice is Appendico-cecostomy, as devised by the author of this paper, July 21, 1909. It is the operation of choice for the following reasons: First, if the appendix be sufficiently diseased to cause its removal it would be useless to close and make another opening. Second, Tuttle, of New York, says that there is a close relationship between chronic appendicitis with adhesions and mucus colitis, and that the removal of the appendix accounts for a portion at least of the good results that follow Appendicostomy. Hence the choice of operation.

As Appendico-cecostomy is a new operation, though practically a cecostomy, and as its technique has been described only once, and since modified, I beg to digress long enough to repeat it before describing the technique of Appendicostomy, the title of this paper.

Briefly it is as follows: Make a small inter-muscular incision at McBurney's point, expose the head of the colon. Tie off the meso-appendix, including the appendicular artery, divide the former and amputate the appendix about three-eighths of an inch from its base and invert the stump. Then introduce a No. 12 soft rubber catheter and pass a couple of sero-muscular purse string sutures, preferably chromic cat gut on the anterior surface of the cecum, and tie. This makes the most complete valve-like arrangement or finger-like projection into the lumen of the bowel that it is possible to make. Then introduce a tier of Lembert sutures in the serous surface of the bowel, two above and two below the appendicular opening, or on either side if you choose, the ends of which are left long and brought out through the peritoneum and muscles into the abdominal incision and tied. Then, anchor the cecum to the parietal peritoneum, the deep fascia and skin being closed in layers. In the case reported by me, in the January number of the South Carolina Medical Journal, the appendix was amputated at its base, but three-eighths of an inch stump makes a much better valve-like projection.

In Appendicostomy make a similar incision at McBurney's Point and drag the appendix into the abdominal wound. Tie off the meso-appendix, except don't include the lesser appendiceal artery and free the appendix down to its base. Then anchor the cecum to the parietal peritoneum at the lower angle of the wound by sutures on either side and above the appendix, the last suture being used to close the peritoneum. The abdominal wound is then closed by layers with cat-gut sutures and the appendix is stitched to the skin on either side. "Monynihan drags gently upon the appendix until its base is on a level with the parietal peritoneum and stitches the meso-appendix to the latter by a single cat-gut suture." Close in the usual way by layers; wrap the appendix in rubber tissue and apply the usual dressings, or wrap the appendix in gauze and cover with a piece of rubber glove, as I did in the absence of rubber tissue. After a couple of days remove the dressings and amputate the end of the appendix, which is usually gangrenous about three-eighths of an inch from the skin. Dilate the appendix and introduce a soft rubber catheter. Joseph Pettijohn, of San Francisco, has recently devised a new method of Appendicostomy. He makes an "incision about three inches long downward parallel with the fibers of the rectus muscle and about three-fourths of an inch internal to its border, beginning at a point about half an inch below the level of the umbilicus." After dividing down to the rectus muscle the latter is pushed toward the median line and the incision completed into the abdominal cavity. He next locates the appendix and makes a stab wound down through the abdominal wall, a piece of gauze being held over the bowels to prevent wounding them. He then "seizes the appendix with a pair of long forceps and pulls it through the wound and secures it there with sutures." In case the meso-appendix is too short or narrow to be drawn out through the incision, he clips its free edge well towards its termination in order not to interfere with the blood supply." The end of the appendix is removed about one-fourth of an inch from the skin and a soft rubber catheter is introduced. He claims that the opera-

tion is cleaner than the one ordinarily done, and that the colon can be flushed at once; that there is less danger of hernia; that you can get directly over the appendix, and that the repair of the sinus is much simpler. To stab the side, draw the appendix through the wound is ideal, but I cannot favor the long incision down by rectus muscle to locate the appendix when the whole can be done through a small gridiron incision, which is a little more than a stab wound. It can be done aseptically and almost without danger of hernia. So much for operative measures in the treatment of diseases of the colon. But before resorting to the knife, every patient should have the benefit of internal medication and rectal injections with the patient in the knee-chest position. Failing to obtain relief after a fair trial, Appendicostomy, cecostomy or appendico-cestomy is perfectly justifiable. The choice of operation must always depend upon the diseased condition. With a fair knowledge of anatomy and the technique of the operation both can be done quickly and with safety to the patient.

Appendicostomy has its most useful field perhaps in the treatment of amebic dysentery. Chronic cases that have hitherto resisted every plan of treatment by the mouth and rectal injections respond promptly to through and through irrigation.

Various solutions have been successfully used, namely: quinine, kramaria, hydrastis, ichthyol, permanganate of potash, silver nitrate and salt solutions in varying strengths. Gant believes that much of the good comes from the mechanical effect of washing out the toxins from the bowels and the consequent cleansing of the ulcers. He no longer uses cold water in amebic dysentery. Tuttle, on the other hand, says that it does not make much difference what solution is used so long as the temperature is below 70° F. With local irrigations he thinks that it would be well to use ipecac at the same time.

B. W. J., age 26 years, white, male, entered the Spartanburg Hospital March 15th, with the following history: Present illness began two years ago. Had diarrhoea from November to February, 1908, when he was relieved and felt quite free from his troubles, until his second attack, in November, 1909, when he was seized with griping pains in his bowels, followed one week later with a return of diarrhoea, which was characterized by blood and pus and tormina. The stools increased daily until they were only thirty minutes apart. Notwithstanding, he had a ravenous appetite and ate accordingly, the loss of flesh was gradual, and he grew correspondingly weak. Dr. A. R. Fike, the family physician, who asked me to see the patient with him, said that he had administered by the mouth and rectum such remedies as it is customary to give in such cases. The diagnosis of amebic dysentery being made and confirmed by the microscope, I suggested Appendicostomy. On March 6, 1910, the patient was placed on the operative table and, with the assistance of Drs. A. R. Fike and W. G. Sexton, a small gridiron incision was made at McBurney's Point. After the meso-appendix was ligated and the appendix freed down to its base, the cecum was securely anchored with chromic cat-gut to the parietal peritoneum and the appendix, though small but patulous, was stitched in the wound and the latter was closed around it. The appendix was then dressed in the usual way. On the second day its end was amputated about three-eighths of an inch from the skin. The lumen of the appendix was so small I could not introduce a small-size rubber catheter. In the effort to dilate, it was

badly lacerated. Nothing further was done except to redress it and to wait for further union. On the fourth day I reopened down to the fascia and had no trouble in introducing a soft rubber catheter. With a tube inserted into the rectum, the colon was irrigated through and through from above downward. There were no ill effects from reopening except there was a small amount of pus around the catheter during the two succeeding days which disappeared quickly after the instillation of a 25% solution of hydrogen dioxide. When the appendix is small always remove its tip and introduce a catheter at the time of operation A ligature thrown around the appendix and tied will prevent leakage from around the catheter. On the fourth and fifth day the colon was flushed with a normal salt solution until it came through the rectum clear. The day following thick soap-suds water was used and followed with formalin, one dram to the quart. At the end of the week, which was the first miscroscopic examination after the operation, not a single ameba could be found, nor have we been able to find one since. The diarrhoea immediately disappeared with the blood and pus. The patient left the hospital at the end of two and one-half weeks. He irrigates himself daily with the assistance of his wife. The improvement has been marvelous, and he feels quite well, and has returned to his work, which is that of a salesman. Suffice it to say that this patient has lived in Spartanburg County all his life. Made one visit to Augusta, Ga., fifteen years ago and one visit to Asheville two or three years ago. So far as I know, this is the first and only case of amebic dysentery diagnosed in Spartanburg County, and the first case of Appendicostomy reported to this association.

In chronic constipation Appendicostomy has afforded gratifying results. The headaches, insomnia and depressions have rapidly improved from the very beginning of the irrigations, and from reports, these patients refuse to allow the fistula to close. Syphilitic and tuberculous ulceration of the colon have improved and some cases cured by colonic irrigations.

Appendicostomy has been suggested in pernicous anemia, hemorrhagic colitis, auto-intoxication, diffuse septic peritonitis, and almost every disease of the colon that is characterized by chronic diarrhoea, etc.

Lastly, Read, of Cincinnati, has demonstrated the value of colonic treatment, which he terms "coloclysis" in the case of acute aseptic peritonitis. He reports a case that was admitted to the Cincinnati Hospital five days after the rupture of a pus tube, with a pulse of 130, temperature 103 5/10, respiration 26, general peritonitis, white count 17,000.

He opened on the right side immediately after admission, and removed a leaking pus tube and the appendix. He then fixed the cecum in the incision and opened it and introduced a large rubber catheter, and at the same time inserted a short rectal tube, and then proceeded to fill the colon with a saline solution at 105° F. With the colon filled, he speaks of it as a hot-water bottle in the inside of the abdomen. The patient was extremely weak and required a saline infusion. She was hurriedly put to bed. After the colon was thoroughly washed out and the patient had reacted, the saline drip was instituted through the tube in the cecum and the patient nourished in the same way. The case is reported cured, also a similar one.

Since writing this paper, I have learned that the case reported above became infected while working in the office of a mill president, who contracted the disease two years previous, in the Mississippi Delta.

PULMONARY TUBERCULOSIS.*

THE PERSISTENT NEED OF EARLIER DIAGNOSES,

BY LUCIUS B. MORSE, M. D., Hendersonville, North Carolina.

If there is one subject more than another for which a physician might feel like apologizing for bringing to the attention of a medical body, it seems to me that it would be the early diagnosis of tuberculosis. I do not mean that there is any inherent reason for an apology, save only for the fact that so much has been written and said upon this phase of the tuberculosis problem in recent years, surely one would hardly be expected to say anything new. And too, I have often held that about the best excuse for the writing of medical articles in general is that they contain something new. Therefore, in occupying your attention to-day, I am doing so in violation of a rather conscientious idea which I have held regarding the justification of medical contributions.

While I will say nothing that is new, I will, on the other hand, promise not to burden you with well-known text-book facts. Indeed my mission here is that of an appeal for the early diagnosis, rather than a reiteration of the means by which such diagnosis are made. In the earlier days of the crusade against tuberculosis, now several years ago, it seems to me that half of the literature appearing in this connection had for its burden, the early diagnosis of the disease. As a matter of fact, latterly there has been something of a dearth of dissertations upon this theme. The "early diagnosis" has either worn out, or the doctor has learned his lesson. It may be the former, but surely it is, that the average physician has not yet learned his lesson. The importance of the early-diagnosis-lesson, in its application to tuberculosis, doubtless seems the greater to the man who is constantly coming in contact with these cases, though we should not forget the fact that the lesson of the early diagnosis applies alike to every disease to which mortal flesh is heir.

As conservers of the public health, it should be borne in mind that, next to prevention comes the early diagnosis or detection of disease. What a long list of diseases there are that are curable only when detected in their early stages; alike both in surgery and in medicine! Per contra, how small is the list in which our services are of much avail after they have gained a considerable headway! It is the early diagnosis, too, that is so difficult to make. A mere tyro can diagnose a case of tuberculosis when nothing can be done for it.

It seems to me that it is well for physicians to take stock occasionally of the character of work they are doing. Are we as individuals doing a little closer, a little more pains-taking work each year than we did the previous year? Are we bringing to bear all of the scientific acumen we possess in the ferreting out of the real nature, the true inwardness of our cases? In short, are we really certain that we are better doctors this year than we were last; or, haven't most of us gotten into certain ruts; practicing our art, as it were along the lines of least resistance?

There is, I think, no doubt that the practice of medicine demands more from its votaries than that of any other calling, and just because of this peculiar claim, it seems to me that the danger of relaxation is greater. For the man of business, relaxation means at most only a pecuniary loss; but with us, any-

thing short of our best efforts means the loss of human lives. The price of good work is eternal vigilance.

Just why is it that earlier diagnoses are not made? I cannot believe that it is a lack of interest concerning the welfare of the patient by the advising physician. Nor would I concede that ignorance is responsible for a very large part of the tardiness in ascertaining the nature of disease; surely such is not the case as regards tuberculosis. I believe that the whole fault lies in this: Physicians, in the main, do not carefully examine their patients. Now why do they not do so? There are, I think, three leading reasons: First is timidity. I am forced to believe that the average physician hesitates from sheer timidity to give to refined, sensitive patients, particularly women, the same searching examinations that he would give to patients in a charity clinic. Second, is the rather prevalent idea that patients do not want exhaustive examinations. Lastly, the old notion that patients will become, if thorough examinations are made, over-solicitous about their health, even to being morbidly introspective.

It seems to me that it is well worth our while to briefly look into these reasons and see whether really any of them are tenable. Now modesty is a most commendable virtue, both in men and in women. But my experience leads me to believe that almost every patient has a higher regard for a physician who goes in a straightforward manner to his task, fully exposing those portions of the body that are to be examined. A careful examination can be made in no other manner. Many a patient have I seen in whom their family physician had only examined the chest through one or more articles of clothing! As to the patient not desiring a careful examination; I have seen but few patients in my life, in whom there were reasons for doing especially careful work, that did not appreciate it. They indeed like to feel that their physician is finding out the true nature of their trouble. In regard to their becoming over-solicitous or introspective; I do not believe that this result follows if the physician's attitude in reference to the examination is a routine, matter-of-fact one. Let the patient understand that careful examinations are simply a rule of practice, whether the disease suspected be mild or severe.

As to the advisability of telling patients the results of examinations, this depends upon a great many factors which here cannot be entered into. The custom of physicians shielding the incurable patient from a knowledge of his malady is as old as medicine. But the incurable disease of one generation becomes a curable one in the next, not so much oftimes from the discovery of newer and more potent drugs as through more refined methods of early detection. In a general way, in these cases, a good rule is as follows: In acute cases, reticence; in chronic cases, frank statements are demanded. Plain explanations are all the more obligatory with the chronic patient if his disease is in a curable stage. A vast number of lives have unquestionably been saved by frankly telling tuberculous patients the facts, a practice which has become quite general everywhere. How indeed can a patient be expected to follow the rigorous life necessary to bring about a cure from tuberculosis, extending often over years, when his physician has told him that he was only "threatened with lung or chest trouble; bronchial trouble," and the like. If a frank statement brings with it a transient shock; it just as certainly insures a closer adherence to the necessary change in the mode of life, which offers, many times, the only hope of recovery. To show that

there is a justification in telling other chronic patients than the tuberculous the nature of their troubles, no less an authority than Osler emphasized the value of a trace of albumen in the urine in actually increasing longevity. On first thought this seems paradoxical. The explanation is simply this, viz: that a patient who is conscious of having a trace of albumen in his urine, as indicating a Bright's disease, commonly an interstitial nephritis, will almost invariably as a direct result of that knowledge, take such painstaking care of himself as will actually increase his life expectancy over that of a corresponding person without the trace, and, too, without the added care. How often indeed are we forced to say in substance to the chronic patient: "Your recovery lies largely within yourself"?

The reasons which were set forth for making careful physical examinations, it seems to me, apply with equal force, and fewer objections, to the doing of careful laboratory work. Those who are insufficiently equipped or inexperienced to do this class of work, owe it to their patients to enlist the services of a good laboratory man.

That there is yet a very real need of insisting on earlier diagnoses of tuberculosis is demonstrated by the fact that well-advanced cases are constantly being referred to men doing special work in this line, which cases were supposed to be incipients, or in whom the very existence of tuberculosis had only just been suspected. In most every instance the fatal loss of time would have been averted had the physician made a searching examination months previously. There has been, I am happy to say, a decided improvement along this line in recent years but the goal is as yet far from being reached. It must always be remembered that, other things being equal, a cure from tuberculosis is directly dependent upon the stage of the disease in which active measures are instituted for its relief. Tuberculosis taken early is indeed a most curable disease. This is amply proven by the fact that we now know that a large proportion of the human family at death show unmistakable evidence of having had this affection; the proportion reaching likely not less than 85 per cent. Most cases, it is thus seen, contract the disease, suffer from it for a period of time and recover; neither they nor indeed their physicians ever suspecting the true nature of the malady.

It thus behooves physicians, particularly general practitioners, who commonly first see these patients, to search most diligently for the cause of all symptoms of a suspicious character. Hard winter colds, all severe coughs with expectoration, all mild coughs of sixty days duration, unresolved pneumonias, protracted attacks of grippe, all cases of hemorrhages or even blood-tinged expectoration, particularly if any of these conditions are accompanied by the loss of a few pounds in flesh or the existence of one-half to one degree of fever as evidenced by a two-hour temperature record —all these symptoms demand at once a thorough examination of the whole chest, together with a microscopic search for the tubercle bacillus. If, even then, negative results are obtained, the tuberculin test should be made.

Nor is it enough to ascertain merely the existence or non-existence and extent of a tubercular infection. It is of fundamental importance to form a judgment as to the effect which the infection is having upon any particular individual. In this the constitutional symptoms are of paramount importance. Extreme measures might be necessary in one patient in whom the area of involvement was slight, but in whom the constitutional

effects were very severe. On the other hand, some patients with extensive involvement have a relatively small amount of constitutional disturbance, and in these greater latitude in treatment is permissible.

I enumerated a little while ago some of the symptoms that might be looked upon as suspicious, and as justifying a careful examination. I would also like to say a few words as to suspicious surroundings and personal conditions, where a careful man would be more inclined to look for tuberculosis. First of all, I would like to call attention to infected negro house servants. From my own experience in trying to form judgments, as I do every case, as to the probable source of infection, I have become convinced that this cause is a very common one. This fact though is quite well recognized throughout the South, but it needs reiteration again and again. The physician should not, in so far as lies in his power, allow a family under his care to employ any negro or other servant, particularly as a nurse, who has any lung or chest trouble whatsoever, or indeed who has a persistent cough of whatever character. Careful search in such families will almost certainly disclose some startling facts.

To sum up, physicians should be on their guard for tubercular developments, among all patients who have been living with or near those so infected, among all persons who are poorly nourished from whatever cause, among those who are persistent house-dwellers either by habit or by force of circumstances, in those who live or work in poorly lighted and badly ventilated houses, in those especially who are unsanitary in their mode of living, and finally, among those who remain in "poor health" following any and all acute diseases. In short, my plea before you to-day is a plea for earlier diagnoses, for, next to prevention, it constitutes the greatest life-saving work of the modern physician in his fight against the great white plague.

MINUTES OF THE HOUSE OF DELEGATES

OF THE SOUTH CAROLINA MEDICAL ASSOCIATION, SIXTY-SECOND ANNUAL SESSION.

The House called to order by the President, in accordance with the Constitution, at 2:00 o'clock. After waiting several minutes, and there not being a quorum present, the meeting was adjourned by the President until 3:15.

At 3:15 the House was again called to order by the President, the following Committee on Credentials being appointed:

Dr. Burdell, Chairman,
Dr. J. T. Taylor,
Dr. Walter Cheyne, Secretary ex-officio.

A recess of ten minutes was granted by the President, while the Committee looked into the credentials of the delegates.

At the conclusion of that time, the following report was read by Dr. Burdell:

Dr. Burdell:

Mr. President, I beg to report the following members present:

COUNTY	DELEGATES
Abbeville	C. C. Gambrell, M. D.
Anderson	J. R. Young, M. D. J. C. Harris, M. D.
Aiken	T. C. Stone, M. D.
Barnwell	H. R. Tison, M. D.
Chester	J. P. Young, M. D.
Charleston	Allen J. Jervey, M. D. C. W. Kollock, M. D. R. S. Cathcart, M. D.
Colleton	J. E. Scott, M. D.
Darlington	J. T. Coggeshall, M. D.
Dillon	D. M. Michaux, M. D.
Dorchester	A. R. Johnston, M. D.
Edgefield	W. D. Ouzts, M. D.
Greenville	C. B. Earle, M. D. E. W. Carpenter, M. D. F. G. James, M. D.
Kershaw	W. J. Burdell, M. D.
Laurens	W. D. Ferguson, M. D. T. L. W. Bailey, M. D.
Lexington	G. F. Roberts, M. D.
Newberry	W. C. Houseal, M. D.
Oconee	E. C. Boyle, M. D.
Orangeburg	A. W. Browning, M. D.
Columbia	Wm. Weston, M. D. W. A. Boyd, M. D.
Pickens	W. A. Tripp, M. D.
Saluda	Waters, M. D. Pitts, M. D.
Spartanburg	L. Rosa H. Gantt, M. D. W. P. Coan, M. D. Geo. E. Thompson, M. D.
Sumter	S. C. Baker, M. D.
Union	R. R. Berry, M. D.

Report received as information.

Charleston, S. C., January 1, 1910.

ANNUAL REPORT OF DR. C. P. AIMAR, TREASURER, SOUTH CAROLINA MED. ASSOCIATION.

Charleston, S. C., January 1, 1910.

To the President and Members of the South Carolina Medical Association:

Gentlemen:—

In accordance with the custom commenced last year, the Treasurer herewith submits his Annual Report, together with a complete itemized statement of the receipts and expenditures for the fiscal year 1909.

The expenses of the Association continue to increase and we are unable to meet all of our indebtedness last year, there being some bills that had to be carried over to the new year. These matters are brought to your attention for careful consideration.

The Treasurer further begs to report

that the books of his office—together with his accounts, vouchers, bank-books, etc. —have been examined by the Committee appointed by the Chairman of Councilors, consisting of Drs. J. L. Dawson, President, and J. T. Taylor, and by them carefully examined and found correct, whose approval thereof is duly recorded in the above mentioned books.

An itemized statement follows.

Respectfully submitted,

CHAS P. AIMAR, M. D.

Treasurer, South Carolina Medical Association.

SOUTH CAROLINA MEDICAL ASSOCIATION. STATEMENT 1909.

CASH RECEIVED.

1909.

January.		
1	Balance Cash on Hand	$ 54 19
29	Georgetown County Med. Society,	18 00
February.		
15	Kershaw " " "	27 00
15	Lexington " " "	48 00
24	Saluda " " "	24 00
March.		
3	Laurens " " "	78 00
4	Greenwood " " "	42 00
9	Georgetown " " "	6 00
9	Dorchester " " "	66 00
13	Hampton " " "	21 00
15	Florence " " "	12 00
16	Oconee " " "	
	Returned by Bank—protested....	30 00
17	Clarendon County Med. Society,	45 00
18	Aiken " " "	69 00
18	Marlboro " " "	48 00
18	Pickens " " "	51 00
19	Saluda " " "	3 00
19	Orangeburg " " "	54 00
20	Spartanburg " " "	141 00
21	Greenville " " "	105 00
21	Horry " " "	24 00
23	Sumter " " "	30 00
23	Orangeburg " " "	3 00
23	Charleston " " "	150 00
25	Greenwood " " "	3 00
25	Chesterfield " " "	21 00
26	Darlington " " "	45 00
26	Union " " "	33 00
26	Anderson " " "	50 00
26	York " " "	66 00
27	Chester " " "	27 00
27	Oconee County Medical Society, second check—the first having been protested—as above	30 00
27	Oconee County Med. Society	3 00
April.		
1	Medical Society of Columbia	153 00
1	Spartanburg County Med. Society,	3 00
2	Greenville " " "	15 00
3	Anderson " " "	64 00
5	Edgefield " " "	21 00
5	Florence " " "	3 00
5	Abbeville " " "	51 00
8	Union " " "	6 00
8	Greenwood " " "	3 00
8	Saluda " " "	3 00
9	Lexington " " "	3 00
13	Georgetown " " "	6 00
13	Newberry " " "	39 00
14	Aiken " " "	9 00
14	Cherokee " " "	21 00
14	Union " " "	3 00
15	Kershaw " " "	3 00
17	Newberry " " "	3 00
17	Lee " " "	24 00
17	Edgefield " " "	6 00
18	Marlboro " " "	6 00
18	Laurens " " "	9 00
20	Williamsburg " " "	27 00
20	Colleton " " "	9 00
20	Chesterfield " " "	3 00
20	Marion " " "	27 50
20	Greenville " " "	3 00
20	Chester " " "	9 00
23	Newberry " " "	3 00
May.		
6	Newberry " " "	3 00
10	Colleton " " "	9 00
15	Beaufort " " "	12 00
18	Colleton " " "	6 00
June.		
2	Oconee " " "	3 00
7	Laurens " " "	3 00
8	Dr. J. L. Dawson—for button	1 25
9	Dr. C. P. Aimar—for button	1 25
9	Dr. C. M. Rees—for button	1 25
9	Union County Medical Society	3 00
13	Dr. J. C. Sosnowski—for button	1 25
19	Greenwood County Med. Society,	3 00
19	Darlington " " "	3 00
August.		
6	Dr. E. T. Kelley—for button	1 45
14	Dr. C. E. Gamble—for button	1 45
16	Dr. E. H. Barnwell—for button	1 25
September.		
1	Dr. L. H. Jennings—for button	1 45
13	Spartanburg County Med. Society,	9 00
October.		
11	Dr. W. J. Burdell—for button	1 45

November.
15 Spartanburg County Med. Society, 3 00

Total $2,031 74

SOUTH CAROLINA MEDICAL ASSOCIATION. STATEMENT 1909.

CASH EXPENDED.

1909.

February.
15 Bank exchange on check..... $ 0 15
24 Bank exchange on check 10
March.
3 Bank exchange on check 15
5 Bank exchange on check 15
10 Bank exchange on check 15
10 Dr. Walter Cheyne, Secretary's salary—one (1) year's salary—1908, to January 1, 1909 ..... 300 00
10 Dr. J. T. Taylor, Councilor's expense to meeting at Columbia, S. C. 11 10
10 Dr. Walter Cheyne, Secretary—for stamps 7 50
13 Bank exchange on check 10
15 Bank exchange on check 10
18 Bank exchange on check 15
18 Dr. J. W. Jervey, Editor—for Journal expenses 125 00
19 Bank exchange on check 25
22 Bank exchange on check 45
24 Charleston Savings Institution—to take up check (protested) of W. E. Rosser, Secretary of the Oconee County Med. Society.... 30 00
24 Bank exchange on check 10
26 Bank exchange on check 10
27 Bank exchange on check 30
29 Bank exchange on check 15
April.
1 Dr Walter Cheyne, Secretary—for stamps, mailing programmes.... 13 19
1 Smith Premier Typewriter Company—typewriter for Secretary's office, Dr. Walter Cheyne 65 00
2 Bank exchange on check 25
3 Bank exchange on check 15
6 Safford Stamp Works—stamp for Dr. Walter Cheyne, Secretary.. 2 25
6 Dr. Walter Cheyne, Secretary—for stenographic and typewriting allowance—Jan. 1, 1909 to April 1, 1909, first quarter 25 00
8 Bank exchange on check 10
10 Bank exchange on check 10
5 Bank exchange on check 15
13 Bank exchange on check 10
15 Bank exchange on check 15
17 Bank exchange on check 10
19 Bank exchange on check 15
21 Dr. F. M. Dwight—Councilor's expenses to attend meeting at Columbia, S. C. 8 75
22 Mazyck P. Ravenel—Annual Orator 78 20
23 Bank exchange on check 15
23 Osteen Publishing Company—for printing programs 28 50
23 American Medical Association, for members' cards—County Soc's 1 50
24 Bank exchange on check 10
26 F. W. Wagener & Co.—for hotel bill of Dr. Walter Cheyne, Secretary, and Stenographers, Pine Forest Inn, Summerville, S. C. 32 75
29 J. J. Furlong Printing House—for 200 stamped envelopes and printing, for Treasurer's office, Dr. C. P. Aimar 5 50
29 Dr. J. W. Jervey, Editor—balance of salary to April 1, 1909 ..... 450 00
29 Dr. Walter Cheyne, Secretary—railroad fare, Summerville meeting, etc. 8 55
29 Dr. Walter Cheyne, Secretary's salary to May 1, 1909 ..... 100 00
29 Dr. J. T. Taylor—expense of Councilor visiting Med. Societies of Charleston, Dorchester, Colleton, Hampton and Beaufort 20 00
29 Dr. Branford Lewis—expenses attending meeting at Summerville, S. C., R. R. fare, etc.—Annual Orator 57 00
29 Dr. C. P. Aimar, Treasurer—expenses attending meeting at Summerville, S. C., R. R. fare, etc. 15 85
May.
11 Bank exchange on check 10
7 Bank exchange on check 10
18 American Medical Association, for 100 secretary depart blanks..... 2 00
18 Dr. J. F. Williams—expenses to attend meeting of Council, Columbia, S. C., R. R. fare, etc. 9 20
21 Dr. J. L. Dawson—expenses to attend meeting of Council, Columbia, S. C., R. R. fare, etc. 10 50
20 Bank exchange on check 10
24 Dr. C. W. Kollock—Expenses (Leg. Com.) of attending meeting at Columbia, S. C. 12 80
24 Dr. Walter Cheyne, Secretary—stamps, $5.00; and expenses as

councilor attending meeting at Columbia, S. C., $3.85 ..... 8 85
24 The State Co.—Envelopes and letter heads, etc., for Secretary's office—Dr. Walter Cheyne 14 00
31 Miss Ida Lamb, Charlotte, N. C., stenographer, meeting at Summerville, S. C. 93 15
31 Dr. O. B. Mayer, Councilor—expenses attending meeting at Columbia, S. C. 6 65
June.
4 Dr. H. R. Black, Councilor—expenses 17 74
7 The Whitehead & Hoag Co.—for 95 Assn. buttons 102 60
7 Bank exchange on check 10
12 Bank exchange on check 10
14 Dr. F. M. Dwight, Councilor—expenses attending meeting at Columbia, S. C. 5 24
14 Dr. Walter Cheyne, Secretary, expenses as delegate to meeting of American Medical Association (½) 41 15
14 Miss Mary E. Miller, Charlotte, N. C., stenographer—meeting at Summerville, S. C. 45 00
24 Bank exchange on check 10
July.
1 Dr. R. S. Cathcart—expenses as delegate to A. M. A., at Atlantic City (½) 41 60
August.
8 Dr. Walter Cheyne, Secretary—for stenographer's allowance to July 1, 1909, $25.00; to salary as secretary to July 1, 1909, $50.00 ..... 75 00
10 Bank exchange on check 10
17 Bank exchange on check 10
September.
4 Dr. L. H. Jennings, Bishopville, S. C., amount due for return of Assn. button 1 25
14 Bank exchange on check 10
November.
17 Bank exchange on check 10
December.
18 Dr. J. W. Jervey, for salary as Editor, for April, 1909, $62.50 May, 1909, $41.66 ..... 104 16

Total $1,981 43

STATEMENT 1909.

Balance of cash on hand, Jan. 1, 1909. $ 54 19
Cash collected from January 1, 1909 to Dec. 31, 1909, inclusive 1,977 55
(as per statement attached)
Total $1,981 74
Cash expended from January 1, 1909 to Dec. 31, 1909, inclusive 1,981 43
(as per statement attached)
Balance Cash in Bank, Jan. 1, 1910.... $ 50 31

Respectfully submitted,
CHAS. P. AIMAR, M. D.
Treasurer.

Charleston, S. C., January 1, 1910.

SOUTH CAROLINA MEDICAL ASSOCIATION. C. P. AIMAR, M. D., TREAS.

Statement, 1909, of the Fund for the Prosecution of Illegal Practitioners—Not Included in the Foregoing.

Balance cash on hand, January 1, 1909....$265 27
Interest on same from January 1, 1909, to December 31, 1909, inclusive 7 21

Total $272 48

Amounts Expended as Follows:
1909, Jan. 7, J. S. Verner—Legal services, prosecution of illegal practitioner in 7th District.....$50 00
1909, March 12, Dr. H. R. Black, Councilor—for prosection of illegal practitioner in 4th District 25 00
1909, July 24, Dr. O. B. Mayer, Chairman—for prosecution of illegal practitioner in 3d District (Dr. C. C. Gambrell's request).. 25 00
$100 00

Balance Cash in Bank January 1, 1910....$172 48

CHAS. P. AIMAR, M. D., Treasurer.

Moved by Dr. Burdell that the report be received as information and spread upon the minutes. Seconded by several and so ordered by the President.

REPORT OF SECRETARY WALTER CHEYNE.

Gentlemen of the South Carolina Medical Association:

I beg to report that the membership of the South Carolina Medical Association has been steadily maintained during the

past year, and the profession at large in South Carolina has been in the limelight of medical opinion in the world more than any year in its history. This is, of course, on account of the new diseases investigated, diagnosed and studied by our Association members. The professional work of our members has actually been a school of instruction for the nations of the world. Every member has been stimulated by the scientific work done and the progress made in the treatment, and the prevention of disease.

Calhoun County has joined with Orangeburg, and Dillon County also has been created the past year, these counties at once taking a firm hold in medical affairs.

The Councilors need help in several counties from active members. The Seventh District Association has been formed and regularly organized. I recommend that all District Association meetings be carefully arranged so as not to interfere with our State Association meeting. I recommend that each Councilor endeavor to organize a District Association.

The organization of County Secretaries has been decidedly a help to the State Secretary and will undoubtedly increase its power after more general membership of each county.

I wish to thank the county secretaries who have so kindly sent me a list of non-members in their counties. I propose to have this list published in our Journal and we should endeavor the coming year to bring these eligible men into the fold of organized membership.

At another time, in an unofficial way, I purpose making some suggestions which my experience as Secretary has taught me would be beneficial, financially and effectively for our Association.

Respectfully submitted,

WALTER CHEYNE, M. D.
Secretary.

Moved by Dr. Gambrell that Secretary's report be received as read.

Moved by Dr. Burdell that the report be referred to a Committee, to report back to the House of Delegates upon the recommendations embodied in the report.

Motion carried and so ordered.

The following Committee appointed:

Chairman, Dr. Gambrell; Dr Allen J. Jervey, Dr. J. R. Young.

Committee ordered by the President to take the matter up and report at the next meeting of the House of Delegates.

REPORT OF SCIENTIFIC COMMITTEE.

Report of Scientific Committee by Dr. J. T. Taylor, Chairman:

Mr. Chairman and Members of the House of Delegates:

The Scientific Committee begs to report that they have with much trouble procured for the Society this program, consisting of forty papers, which they respectfully submit to you for adoption.

J. G. TAYLOR, M. D.
Chairman.

Report received as information.

REPORT OF PUBLIC POLICY AND LEGISLATION.

Dr. Guerry, the Chairman, absent, and following by Dr. Weston:

Concerning one thing which came up in the Legislature last year: Now, Mr. President, I think this Association ought to give its vote of thanks to the members of the Legislature, who are physicians, for their constant support in our work there. They were unanimous last year, and I would like to make a motion that the President, or the Secretary, write, in the name of this Association, and thank each one of the medical members of the Legislature for the active support which they rendered at the last meeting of the Legislature.

Motion carried and Secretary ordered to write the letters.

REPORT STATE BOARD OF HEALTH.

Report State Board of Health by Dr. Robert Wilson, Jr., Chairman.

Mr. President and Members of the House of Delegates, South Carolina Medical Association:

Gentlemen:

I have the honor to present the thirtieth annual report of the Executive Committee of the State Board of Health. During the past year the State has been exceptionally free from serious epidemics. A slight recrudescence of smallpox has occurred, there being at present, besides a number of scattered cases, five foci of infection, distributed as follows: Anderson 1, Aiken 1, Darlington 1, Richland 2. The cases have been, as a rule, mild, only three deaths having been reported so far to the Board.

The most important and far-reaching work undertaken by the Board has been the establishment of a laboratory at Columbia for bacteriological diagnosis and for the treatment of rabies. This laboratory has been in operation since July 1st, under the directorship of Dr. F. A. Coward, of Columbia, who has proved himself to be thoroughly efficient in the performance of his duties and most zealous in his efforts to extend its field of usefulness. Up to the present time 1,250 examinations have been made for the diagnosis of infectious diseases, including typhoid fever, Malaria, Uncinariasis, Diphtheria and Tuberculosis.

Sixty-three animals have been examined for rabies, and one hundred and five persons bitten by rabid animals have been treated. Thirty-five patients are now under treatment.

We have every right to feel encouraged by this admirable beginning, but there are still many physicians who do not avail themselves of the advantages thus offered either because of indifference or because they have not learned of the existence of the laboratory. It is the earnest wish of the Board to have the laboratory used freely by every physician of the State, and we want it thoroughly understood that examinations are absolutely free and that all residents of the State are treated for rabies without charge. At the last session of the General Assembly an Act was passed requiring a prompt report to the Board of Health of certain infectious diseases under penalty of fine or imprisonment for failure to comply. A copy of the law and a list of reportable diseases will be sent to every physician of the State; and we most earnestly request the co-operation of all that we may not be driven to the unpleasant expedient of forcing compliance imposing the legal penalty.

Your attention is called to the Monthly Bulletin issued by the Board, the first number of which upon Smallpox you have already received. This will be followed by others upon Scarlet Fever, Diphtheria, Care of Children, etc. It is the purpose of the Board to mail copies of the Bulletin to households wherein infectious diseases are reported, by which course we hope to extend sanitary education most effectively.

The tuberculosis exhibit was again open at the State Fair last Fall and attracted most favorable attention.

A second conference on Pellagra under the auspices of the Board of Health was held at Columbia, November 3-4. As in the first instance the Board acted upon the suggestion of Dr. J. W. Babcock. This conference was more largely attended than the first and assumed an international scope, far overpassing our most sanguine expectations. A practical outcome of the Conference was the permanent organization of a National Society for the study of Pellagra, of which Dr. J. W. Babcock was elected President. Upon the nomination of The Rockefeller Sanitary Commission for the Eradication of Hookworm Disease, Dr. J. La-Bruce Ward, of Georgetown, has been appointed assistant secretary of the Board and will be placed in charge of the work provided for by the Rockefeller donation.

During the past year the Executive Committee lost by resignation and death two members, Dr. J. A. Hayne and Dr. James Evans, whose places have been filled according to the law by Dr. E. A. Hines, of Seneca, and Dr. Wm. Egleston, of Hartsville, respectively. Dr. James Evans was a member of the Executive Committee of the State Board of Health for nearly a quarter of a century and for twelve years filled the important office of Secretary. Loyal to the highest ideals of professional obligation and public duty he struggled on as long as he was able with noble devotion to render the best service his failing health permitted.

ROBERT WILSON, JR., Chairman.

Received as information and ordered spread upon the minutes as information.

REPORT OF STATE BOARD OF MEDICAL EXAMINERS.

Report of State Board of Medical Examiners by Dr. Harry Wyman, Chairman.

Aiken, S. C., April 14, 1910.

Mr. President and the Members of the South Carolina Medical Association:

I beg leave to submit this as the report of the State Board of Medical Examiners. Since our last report the Board has had a strenuous but successful year. It has striven to maintain the standard of the Medical profession in South Carolina by seeing that good and deserving applicants only were licensed. Our Secretary was sent to the Conference of Medical Education held in Chicago in March, and reports that our Board is doing as good work as any and superior to many. Our only stumbling block in being given credit equal to any is too low requirements of preliminary education and also the clause known as senior curriculum exempting certain students from examination on certain subjects. Last year we requested that this be remedied, but nothing seems to have been done in the matter. Two State Boards last year tried the practical examinations in connection with the written and reported favorably on the results. Several others will do so this year and possibly such a feature will be inaugurated by our Board. Our last examination was held in June, 1909. The applicants for license were registered at the State House from 4 to 7 P. M. At 9 P. M. the Board met at the Hotel Jerome, the following members were present: Drs. J. L. Napier, Harry H. Wyman, R. A. Bratton, H. L. Shaw, J. J. Watson, Joseph Maybank, P. G. Ellisor and A. Earle Boozer. The questions prepared by the members were considered and approved.

The Board proceeded to reorganize, and the following officers were re-elected:

President, Dr. J. L. Napier; Secretary-Treasurer, Dr. Harry H. Wyman; Assistant Secretary, Dr. Mary R. Baker. Dr. Harry H. Wyman was elected a delegate to the Council on Medical Education of the American Medical Association.

The Board reciprocates with the following States: Virginia, Maryland, Illinois, Maine, Michigan, Kansas, Wyoming, Wisconsin, Minnesota, Nevada, West Virginia, Utah and Missouri. The examination began at 9 A. M. Tuesday, June 8, 1909, and continued with the usual intermissions until 1 P. M., June 10, 1909, when all applicants had been examined.

There were eighty-two applicants (seventy- nine males and three females); of these seventy-one were white (seventy males and one female), and eleven were colored (nine males and two females). Of the seventy-one whites, one took the osteopathic examination.

Of the eighty-two applicants who took the examination, forty-six passed and thirty-six failed.

In addition to this regular examination we issued during 1909 sixteen temporary licenses, six licenses by reciprocity and

filled out five affidavits for reciprocity licenses in other States. In addition to its duties of examining applicants for the practice of medicine, the duties of registering and examining nurses has been placed on this Board.

The first examination of this class will take place in 1911. Until January 1, 1911, the reputable and deserving ones can be registered without examination.

At this meeting the term of office of the following members expires.

Dr. Harry H. Wyman, of the Second District.

Dr. H. L. Shaw, of the Fourth District.

Dr. J. L. Napier, of the Sixth District.

Dr. A. E. Boozer, of the State at large.

Respectfully submitted.

HARRY H. WYMAN,
Secretary.

Moved that report be received as information.

Dr Robert Wilson, Jr: Mr. President, there is one matter that Dr Wyman mentioned which I think the House of Delegates should take action on.

Last year, as he said, it was decided that we make an effort to have the preliminary requirements of applicants for examination raised, and I do not think we ought to pass this over, merely receiving this report as information, and say nothing more about it. The Medical College of South Carolina has taken this step. We have determined to raise our entrance requirements, and in the future we propose to have, as a minimum entrance requirement, a four-year high school course, or its equivalent.

In South Carolina we have two grades of high school, the three-year, of which there are more, and the four-year, of which there are fewer. The four-year students are increasing in numbers every year, and I trust the House will make some motion making an effort to raise our entrance requirements.

The reason our body does not receive reciprocity from some others lies here: Many Boards insist upon a four-year high school course, and I hope this Association is going to raise the educational standard.

Dr. Dwight:

I think we ought to back this Board, or not, and I think to make the minimum high school requirement is little enough. The way it stands now a man cannot study medicine with anything less than a high school education, and I would like to make a motion to instruct our Legislative Committee to work to effecting that end next year. I move that the matter be referred to a Committee, and that we give them all the assistance we can.

Dr. Weston:

I would like to ask Dr. Wright to specify in his resolution the four-year high school course.

Dr. Dwight:

I meant to say that we should recommend at least the four-year high school course, to specify that as a minimum.

Dr. Wyman:

I would like to ask the President to instruct the House of Delegates to remove that senior curriculum clause. All applicants before a Board ought to stand the same examination.

It excepts those who can furnish a medical certificate of a college, that they be exempt from examination on anatomy, etc., but that is another stumbling block, because the other applicants are examined on everything.

Dr. Dwight:

I am willing to accept any amendment that will put our profession on the plane with any in the United States.

Motion carried referring this report to a committee to report back to the House of Delegates.

The following Committee appointed by the President:

Drs. Curran Earle, William Weston, T. C. Stone.

REPORT OF THE COUNCIL.

Mr. President and Gentlemen of the House of Delegates:

The Councilor of the first district begs to report that during the past year he has visited all of the county societies in his district. Charleston and Dorchester are doing their usual efficient work. Colleton and Beaufort have not been doing so much as the Councilor feels that they should do. In Colleton County the society was in a most unhealthy condition. The Councilor found that there was little to be done with the society as long as it continued to meet in Walterboro, so he deemed it advisable to reorganize the society at Meggett, S. C., where it is now meeting, and has every prospect of becoming most useful and beneficial to the profession of the county.

J. T. TAYLOR, M. D.,
Councilor for the 1st District.

I beg to report that it has not been my privilege to visit the Orangeburg-Calhoun County Medical Society. The two counties have a joint society, and from what I can learn are working harmoniously and usually have interesting meetings.

The Lexington County Medical Society seems to be in about as good condition as at any time in its history. It meets only quarterly but has clinical cases, reports, discussions at every meeting. I visited and assisted in reorganizing the Bamberg County Medical Society in January. They now seem to be in good working condition and have interesting monthly meetings. Unfortunately there are men in this district who are practicing medicine without license, and I would like to have an expression from this body as to what should be the attitude of the profession toward them.

Respectfully submitted,

W. P. ZIMMERMAN,
Councilor 2d District.

April, 1910.

I am glad to be able to report that the county societies in the third Councilor's district are in fine condition and are doing good work. Never before has there been a time when there was as much general interest in society work. As illustrative of this fact, I refer to the following meetings of some of the societies. On August 6, 1909, the Abbeville County Society held a pellagra meeting, at which were present 65 physicians, some from different councilor districts and a few from other States. This was a very superior meeting, not only on account of its attendance of men in this State who are prominent in connection with this disease but from the great value of the papers read and the discussions that followed.

On November 17, 1909, the Greenwood County Society held a typhoid fever meeting that was largely attended, and also had very valuable papers read and discussed. So valuable was this meeting that those present determined to organize a district medical society. After the election of officers, the society enjoyed the hospitality of the President of the Greenwood County Medical Society at a dinner at the Oregon Hotel. The success of this meeting and the formation of the district society as well as the sumptuous dinner was due to Dr. R. B. Epting, the President of the Greenwood Society.

On January 21, 1910, the third district society met at Abbeville, when a pneumonia meeting was held, at which time papers on this subject were read and the subject discussed at great length. The district society was most enjoyably entertained at the dinner by the local society.

The Laurens County Society is doing good work and have been so sincerely interested in the profession that they are our host this year, and the entertainment which they give the State Association is only an evidence of their professional

advancement. This society, I think, is the banner society of the State, for I understand they have every eligible physician in their county in their society.

Saluda and Newberry Counties are doing good work in their societies and are keeping up with the general progress in society work.

O. B. MAYER,
Councilor 3d District.

Mr. Chairman and Members of the Association:

As Councilor of the fourth district, I desire to submit my first annual report. It is with much pleasure that I report the profession in my district in a most healthy condition. It was impossible for me to visit all of the societies in my district this year, although I beg to say every county has a well organized county society, composed of good and active members. The total aggregate of membership in my district number about 182, an increase of about 15 since our last meeting.

I think it worthy of notice that all, or nearly all, of the young men coming into the profession join and affiliate with the county society.

Our district meeting held at Easley, Pickens County, was well attended, much interest manifested and a goodly number of scientific papers read and discussed. The time of the meeting was changed from January to November. The next meeting of our district association will be held in Greenville.

I desire to report that several counties in my district have, with the help of the laity, organized an Anti-Tuberculosis League and are now waging earnest war against the great white plague. In my own county we employ a trained nurse, who is kept actively engaged and now has the great work well in charge.

In conclusion, I beg to report the profession in my district in a most healthy and organized condition.

Most respectfully,

J. F. WILLIAMS, M. D.
Councilor 4th District.

Secretary read for Dr. Egleston, who was absent, the following report:

April 17, 1910.

To the South Carolina Medical Association:

Gentlemen:

I have to report as Councilor for the sixth district a very healthy condition of affairs in this district.

I have been unable to visit the different societies during the year, but I have been in personal correspondence with them through their secretaries, and they report a complete and continuous organization in each county, and especially active organizations in most of them.

It is a pleasure to report the prompt organization of a very fine society in the new county of Dillon, and I am sure that the profession in this newest county is going to be active and progressive in organized work.

The sixth district society, under the name of the Pee Dee Medical Association, was reorganized in March at a most gratifying meeting held at Florence. The Pee Dee Medical Society is the oldest medical organization in the State, and it is the purpose of the profession in this district to keep it in active energetic existence from now on.

Without going into details, there has been much work done in the way of the suppression of illegal practicing in this district. Several men have been compelled to stop practice, and several others are under close watch with a view of bringing them to task. On the whole this district is rather free of the illegal practitioner, however.

Respectfully,
W. EGLESTON.

Mr. President and Gentlemen:

I beg leave to make this, my second annual report as Councilor of District No. 7, South Carolina Medical Association. I am very glad indeed to report my district being in much better condition scientifically than it was twelve months

ago, but there is still much room for improvement in some counties.

Clarendon County Society was having unsatisfactory meetings every three months until this year, when they adopted the plan of monthly meetings, and very recently began the post-graduate course of study, and have though small, very satisfactory and instructive meetings.

Am sorry to say that Williamsburg, Lee and Georgetown are not up to what we would like to see them, but we are still hopeful that much good might come out of them. Williamsburg seems to offer a large field for good work, as it affords more illegal practitioners than all the rest of my district combined. It is gratifying to be able to state that we organized in Sumter on March 9th last a district association with nineteen members present, representing Richland, Sumter, Clarendon and Georgetown Counties.

May 10th I attended meeting of Council in Columbia. On September 16th spent the day in Williamsburg County, its society having been called for the special purpose of looking into the matter of illegal practitioners of that county. It seems to be the dumping ground for that class of doctors in my district. We got them all on the run without suit or injunction, five in number, but am afraid, on account of the lax way in which the county society acts, the flight of some have been checked. One illegal practioner was reported last week from Turbeville, Clarendon County. The greatest trouble we have is with this class of work, and the greatest drawback is in the county societies expecting, in the majority of instances, the Councilor to do all of the work. It is our opinion that if each county society would require that each applicant for membership is registered before his or her name is enrolled, it would be an easy mater to tell whether or not the applicant was qualified to legally practice, and when an illegal practitioner appears, the county society appoint a committee to get up data and turn same over to Councilor and work with Councilor to this end; much good could be accomplished and much trouble and friction averted.

Respectfully submitted.

F. M. DWIGHT, M. D.,
Councilor, District No 7.

Aiken, S. C., April 18, 1910.

The Councilor of the 8th district would beg to make his annual report as follows: The local societies in this district, which is composed of the counties of Edgefield, Aiken, Barnwell and Hampton, are generally well organized and are doing good work. I have managed to make appointments with and visited all of my counties with the exception of Hampton County, from which I am sorry to say, I could get no answers to my communications, and therefore did not have the pleasure of visiting this society. I visited the Edgefield County Society in January or February and found a good meeting of some 12 or 15 representative men, and although Edgefield is one of our smallest counties and there are fewer physicians in it than in most any other county in the State—yet this small body of men are in earnest and their quarterly meetings are well attended, enjoyed and profited by. I regard it as one of the best organizations in this district.

It gives me pleasure to report that the Barnwell County Society, after laying in a dormant state so long, has taken on new life and will, I think, in the future be a live society. There is good material in this county and there is no excuse for them not having good meetings in the future. The plan proposed of having the society to meet in different portions of the county, will, it is hoped, offset the poor railroad connections.

The Aiken County Society, while one of the largest, has not had the full at-

tendance in the past year that it should. The want of interest of the physicians in the county seat where the society meets is largely the cause of the falling off of interest in this society.

If our State society would fail to honor or elect to office members that are not loyal to their county societies, perhaps it would have a wholesome effect. The cause of many complaints and dissatisfaction in the past, has been the failure of many members to get the Journal. I would advise that the mailing list be revised as often as possible. The secretaries are largely responsible for this. If they would report promptly to the Journal any complaint, this could be corrected and much dissatisfaction prevented.

Respectfully submitted,

T. G. CROFT,
Councilor 8th district.

Report by Dr. Walter Cheyne, of the Delegates to American Medical Association:

Sumter, S. C., April 8, 1910.

To the South Carolina Medical Association:

Gentlemen:

Your delegates to the American Medical Association beg to report that they attended the meeting of the House of Delegates of the American Medical Association held in Atlantic City, June 7-11, 1909, and were present at every session of this body. Matters of vast importance to the profession and public at large are considered at every session and constant attendance and attention are necessary for an intelligent vote on the various questions. It is hard to realize the magnitude of work accomplished and the amount of time and energy that the members of the various committees are giving for the improvement and benefit of the profession as a whole.

The past year has been the most successful in the history of the Association. It has gained in membership 2,592, showing a total membership on May 1st, 1909, of 33,935. Its finances are on a sound basis, showing an excess of several hundred thousand dollars over its liabilities. It has outgrown its present printing plant and building, and means has been provided to erect a new building to meet the present requirements and future growth.

We will not detail the various matters that were adopted by the House of Delegates, as they have been published in the Journal and you are doubtless familiar with them. The words of Dr. W. H. Welch, in the report of the Board of Trustees, expresses strongly and concisely what has been accomplished. "The Association, through its active committees, has made a most comprehensive study of medical education in this country and accomplished most positive results in elevating and standardizing the same. It has made itself felt in national legislation and aided in the moulding of laws to just and righteous ends. It has laid bare innumerable frauds and made it impossible for them to be longer unknowingly perpetrated on the profession and the people. It is educating the masses in general matters pertaining to medicine through its Bureau of Public Instruction; it is stimulating scientific investigation by means of rewards for original medical research and commendable scientific exhibits.

Through its initiative the profession of the United States has been reorganized, or rather organized, into an intelligent, coherent body which has come to learn its rights, to know its power and to feel its duties and obligations. All of this and much more has been accomplished in the brief period of ten years, and your Trustees feel that they would be derelict in their duty did they not add with pride and sentiments of regard that the one man above all others to whom we are indebted for these great things is our present Editor and General Manager, Dr. George H. Simmons."

To be a component part of this organization should prompt feelings of

pride and stimulate most active interest in all its work.

That our State is recognized is evidenced by the great honor the Association has conferred upon us by selecting unanimously one of your members for the second highest office in the gift of the profession—Dr. Robert Wilson, Jr., of South Carolina, First Vice President, American Medical Association.

Respectfully submitted,

WALTER CHEYNE, M. D.
R. S. CATHCART, M. D.

Report received as information.

REPORT OF COMMITTEE ON NECROLOGY.

Report Committee on Necrology by Dr. E. A. Hines, Chairman.

In submitting this report the Committee wishes to express its gratitude to the Secretaries of the various County Associations as well as other individuals for the prompt and efficient manner in which they responded to our inquiries. There are many difficulties which beset the pathway of the seeker after this kind of information. This report covers the period from January 1st, 1909, practically to the present time. Two of our ex-presidents have passed away within this period. Dr. James Evans, of Florence, was elected President of the South Carolina Medical Association in 1887, and upon the expiration of his term of office was appointed by the Governor to fill the place upon the State Board of Health made vacant by the death of Dr. F. F. Gary. In 1895 he succeeded Dr. Ed. Frazer as Secretary of the Board, which position he held until 1907. Dr. Evans was a member of many scientific bodies besides the South Carolina Medical Association—among them being the American Medical Association, the Southern Surgical and Gynecological Association, the National Conference of State and Provincial Boards of Health, the American Social Science Association, the Institute of Art, Science and Letters and the Pan-American Congress. He was also a member of the United Confederate Veterans, United Confederate Surgeons and the South Carolina Chapter of Sons of the Revolution. He contributed voluminously to the proceedings of the several societies of which he was a member. For nearly a quarter of a century, Dr. Evans was a member of the Executive Committee of the State Board of Health, and for twelve years he occupied the position of Secretary. As a public health officer he labored zealously for the passage of laws for the sanitary improvement of his State. Dr. Evans was a man of liberal culture, and of modest, unassuming manners. As a physician he was loyal to the best ideals and strove continually for the betterment of his profession.

Dr. L. C. Stephens, of Greenville, was President of the South Carolina Medical Association in 1897. He was actively engaged in the practice of his profession for about half a century, and often made scientific contributions to the various associations to which he belonged. Dr. Stephens possessed a princely nature. His exalted character made itself felt upon all who came in contact with him. In the practice of his profession he clung to the highest ideals and lived the ethics of it. His profession meant everything to him, and he never violated the teachings and practices of the highest type of the men of the old school. As a man, Dr. Stephens was fearless in the discharge of duty, tender in his bearing to his fellowmen, gentle as a woman and always modest. It was his pleasure to do for the happiness, comfort and relief of others, but self never asserted itself in him and he always strained a point not to call on others in his own behalf when it was possible to avoid it. This was strikingly brought out in his last illness. Although stricken to his last bed and within a few hours of the Shadow, he insisted that a doctor should not be called

as he did not wish to bother any one. The life of this man was spotless. He leaves a record that should be counted a heritage by this generation, and in the practice of his profession he set an example which none would err in following.

One of the most influential and widely known general practitioners of the upcountry was Dr. Samuel Marshall Orr, of Anderson. He was the second son of Gov. James L. and Mrs. Mary Jane (Marshall) Orr, being the scion of a distinguished and popular family. Dr. Orr received a liberal training in various literary schools, finally graduating from Jefferson Medical College, Philadelphia. He entered co-partnership with his preceptor, Dr. W. H. Nardin, and for twenty-five years engaged in the practice of medicine, in the meantime becoming a leading man in the social and business life of Anderson. He belonged to numerous organizations. Was a member of the first Board of Medical Examiners and occupied other positions that brought him medical honors. He was a man of sound business judgment, and in his relations with other men was especially kind-hearted, considerate and hopeful. It was not in his nature to fail a friend in his hour of need. Dr. Orr was equally prominent in many fields of human endeavor. He was a director in the first building and loan association of his town, and for many years a trustee of the city schools. He was a director in the Anderson Cotton Mills, Vice President of the Farmers' and Merchants' Bank, President and Treasurer of the Anderson Water, Light & Power Co. and succeeded his brother, Jas L. Orr, as President of the Orr Cotton Mills. He was a vestryman of the Episcopal Church for twenty years. Dr. Orr was peculiarly a large hearted, liberal minded man, and was devoted to his wife and children; indeed, he was a man in all that sturdy, honest manhood implies.

There are a number of other physicians who have fallen at the post of duty and whose intimate history we would like to recall. Among them Dr. J. T. Poole, of the City of Laurens, half a century in the harness, thorough gentleman, sympathetic physician. Dr. J. T. Lagrone, of Edgefield, universally beloved and esteemed in his community, also half a century in active practice.

Dr. J. M. Lanham, Spartanburg.
Dr. E. L. Patterson, Barnwell.
Dr. C. F. McGahan, Aiken.
Dr. J. L. Bass, Lake City.
Dr. G. L. Martin, Greenville.
Dr. J. M. Carlton, Abbeville.
Dr. A. F. Anderson, Chester.
Dr. L. J. Mann, Anderson.
Dr. J. G. Duckworth, Anderson.
Dr. R. B. Hannahan, Winnsboro.
Dr. S. D. Harrell, Lamar.

To the memory of one and all of these brethren we would pay Kipling's tribute. The doctor's calling is at once the profession that carries the largest powers and the highest death rate of any profession in the world. In all times of flood, fire, plague, pestilence, famine, murder and sudden death it is required of the doctor that he report himself for duty and remain on duty till his strength fails him or his conscience relieves him —whichever shall be the longer period. This is the position of the doctor; these are some of his obligations. They will not grow less with time. It is laid down that the doctor must save others. It is nowhere laid down that he need save himself. But with all these obligations the doctor belongs to the privileged classes. On presentation of his visiting card the doctor can pass through riotous and turbulent crowds unmolested—even with applause. He can hoist a yellow flag over a centre of civilization and turn it into a desert; he can hoist a Red Cross in the desert and turn it into a centre of civilization. He can forbid any ship to enter any port in the world. He can order houses, streets, whole quarters of cities to be pulled down or burned

up, and if necessary, count on the armed co-operation of the nearest troops to see that his orders are obeyed. In becoming a doctor a man runs more risk of untimely death in the service of the State than he does in becoming a soldier. In the language of another, may they then, not claim from the world a little of that enthusiasm so readily accorded to their brothers in uniform? Should we not sometimes raise a cheer in honor of the great army, the thought of whom as they move among us without the parade of war, so seldom quickens our pulse? Untiringly they protect our homes from those deadly and invisible foes who lurk about the luckiest doors. They bring us hope or sleep in our worst hours of pain or terror, when the door into the unknown stands wide open in front of us or when we see the fearful reflection of its darkness on the pale faces of our friends. How many of us owe all that makes life worth living to doctors—the courage which comes of health, the companionship which gives value to every day, the lengthened sojourn of the old to whom love, memory and custom binds us by a threefold cord, or the frail life of a delicate child who embodies every hope and ambition we possess.

God of our fathers, known of old—
Lord of our far-flung battle line—
Beneath whose awful hand we hold
Dominion over palm and pine—
Lord God of Hosts, be with us yet,
Lest we forget—lest we forget.

The tumult and the shouting dies—
The Captains and the Kings depart—
Still stand Thine ancient sacrifice,
An humble and a contrite heart,
Lord God of Hosts, be with us yet,
Lest we forget—lest we forget.

E. A. HINES.
T. A. QUATTLEBAUM,
J. L. FOLK.

Report received.

REPORT OF COMMITTEE ON TUBERCULOSIS.

Report of Committee on Tuberculosis, by Dr. J. C. Sosnowski.

Mr. President—Gentlemen:

The work of fighting tuberculosis in Charleston has been pursued steadily and diligently, though quietly. Last year a campaign was organized, the object of which was to educate the public at large as to the transmitability, preventability and curability of the disease, and to teach them the facts in connection with the ravages of the disease. The whites did not take the interest we had hoped for in the work, but the blacks, to our surprise, showed far more interest.

One negro who had lost a son from the disease was largely instrumental in working up through the various churches of his race, the organizations which now exist among the negroes in Charleston. Through his efforts nearly every negro church in that city now has its anti-tuberculosis league. The negro Harleston deserves great credit for his good work. As a preliminary to the formation of these leagues, lectures were given in the churches by various physicians of Charleston who very kindly volunteered their services to advance the cause.

The exhibit of the American Anti-Tuberculosis Association was shown for about two weeks in the Museum Building in Charleston and was well patronized. A comprehensive series of concise lectures was given daily at the exhibit, the medical profession being assisted ably by many of the leading citizens among the laity. The work created great interest among all classes and the constantly growing crowds throughout the daily sessions showed that the laity were struck by the exhibit.

Two days were devoted to the negroes, who attended in large crowds. This exhibition was preceded by a series of lectures in all the county and city schools, volunteers taking up the rather arduous task. Director Routzahn, of the exhibit,

was of invaluable assistance in keeping the work up to a high standard. The City Council voted $800.00 for the exhibit.

After the passing of the exhibition a permanent anti-tuberculosis association was organized, with an able Board of Directors to outline and stimulate the work. At present we have in view plans for a "shack" sanitorium as a beginning of a more complete work, and are busy getting a well established society.

At the first definite move of the promoters of this fight after a short delay, the Board of Regents of Shirras Dispensary, a charitable organization, placed in our hands rooms for an anti-tuberculosis dispensary and funds to pay for what medicines may be required. About a half dozen physicians volunteered for the work and the dispensary has now been open for over one year, three afternoons each week. The people are slow to appreciate the benefits of the clinic but are gradually coming in increasing numbers. Here patients are examined and advice given free of charge. If necessary, patients are visited at their homes by the physician in charge. As the other clinics at this dispensary have been built up to quite respectable size by diligent attention, we hope the tuberculosis clinic will be equally appreciated in time to come.

All this sounds like very little accomplished for a year's work, but it represents a large and faithful outlay of time and energy by a number of devoted men. And of these men the chief and most earnest has been, and is still, our President, Dr. Dawson. To his indefatigable zeal the work from its inception to the present time owes its life. He has been ably seconded by a number of workers, who have been following the trails he blazed. I feel that we owe a debt of gratitude especially to Dr. B. A. Elzas and Dr. Robt. Wilson, who in spite of a multiplicity of interests, have devoted themselves assiduously to the furtherance of the work. The members of the lay committees also deserve great credit for their work.

Respectfully,

J. C. SOSNOWSKI, M. D.,
Secretary.

Under the auspices of the Spartanburg County Medical Society a mass meeting was called in Spartanburg on August 27, 1909, and the Spartanburg County Anti-Tuberculosis League organized, the following officers being elected:

President, Dr. L. Rosa H. Gantt.

Vice President, Mr. Hugh Shockley.

Secretary-Treasurer, Dr. D. Lesesne Smith.

Several standing committees were appointed and the League went to work immediately to raise funds. A visiting nurse is employed in looking after the sick and instructing them and their families how to prevent the spread of the contagion.

Three large public meetings have been held, the first of these, which was addressed by Dr. John L. Dawson, had the largest health meeting ever held in this State, the audience numbering over 600. At this meeting a president of a cotton mill became so much impressed with the importance of this work that at his request and his expense another meeting was held a month later, at which Dr. Minor, of Asheville, was the speaker. Two weeks later the cotton mill president came to see me and said that he had been more than repaid for time and money given to holding this meeting, as his men who had attended it had gone back to the mill and cleaned up fore and aft, top and bottom, and had ranged cuspidors along the walls and put up signs "Do not spit anywhere but in the spittoon." A series of meetings is being planned to be held at the various mill villages in the county; the first of these was held three weeks ago with an audience of 500, Dr. O. B. Mayer, of Newberry, being the speaker. The League has been instrumental in having the anti-

spitting ordinance enforced, and every few days some one is arrested and fined $1.00 for violating this ordinance.

Respectfully submitted.

L. ROSA H. GANTT, M. D.
Chairman for Spartanburg County.

REPORT OF THE OCONEE COMMITTEE ON THE STUDY AND PREVENTION OF TUBERCULOSIS.

We have no Anti-Tuberculosis League as yet. Your Chairman has been gradually moulding public opinion by meeting with and addressing the existing institutions which do some of this kind of work. The Chairman wishes to be reasonably assured that the League will begin with every prospect of a long and useful life before fathering the institution. In small communities it requires time to lay the foundations. We are very hopeful of a full fruition of our plans at an early date. Respectfully,

E. A. HINES, M. D.,
Chairman for Oconee County.

April 19, 1910.

Mullins, S. C., April 22, 1910.

Dr. John L. Dawson, Chairman Committee, Anti-Tuberculosis, Charleston, S. C.

My Dear Doctor:

I regret very much that I could not go to Laurens, as I was particularly anxious to attend the meeting over which you would preside. I am sure this feeling was shared by all of your former students, and I know all were present who could leave their work.

I am sending you the following report on the work that has been done in Marion County in regard to tuberculosis:

At a meeting of the Marion County Medical Association last year it was agreed that the County Medical Association and the Anti-Tuberculosis Association for the county shall be one and the same organization. A committee was appointed to carry forward a campaign of education among the people and to invoke the aid and co-operation of civic clubs, ministers, teachers, and intelligent and influential laymen. The press of the county was also used, and have been very courteous and generous. There has been some progress all along the line, particularly among the ladies of the civic league and church clubs, or organizations. Some of them visited the exhibits in Charleston and Columbia and have otherwise manifested their interest in the work, such as lending assistance in the local work and co-operating with physicians and municipal health departments. Ministers have been notified that Sunday, 24th instant, has been appointed as the day set apart upon which to *talk* tuberculosis in all churches throughout the country. Statistics and literature upon the subject have been placed at their service.

I am glad to tell you that affairs in regard to medical matters in the county are in very good condition, and this is encouraging to those engaged in the fight against tuberculosis.

Hoping to send in a better report next year, with best wishes and regards,

Very sincerely yours,
A. MOULTRIE BRAILSFORD, JR.

Abbeville, S. C., April 14, 1910.

Dr. John L. Dawson, Chairman, Charleston, S. C.

Dear Doctor:

I beg herewith to submit my report on the work done by the Abbeville County Anti-Tuberculosis Society for the past year. We have held one public meeting, at which Dr. Walter Cheyne, of Sumter, S. C., delivered a most interesting and instructive lecture, illustrating his address with stereoptican views. This meeting was held in the opera house and was attended by a very large audience. It was our intention to secure the services of a city nurse, and we had sufficient funds pledged to carry this out. We have, so far, been unable to carry this

plan into effect, being unable to secure a nurse.

Our work has consisted in endeavoring by all means in our power to bring to the attention of the public the fact that tuberculosis is communicable and at the same time preventable, and we have fumigated the houses where deaths have occurred from tuberculosis. We have requested all the physicians to notify us immediately when a death takes place, and where the parties are not able to stand the expense of fumigation we have it done and pay for it out of the funds on hand.

Again this year obtained an appropriation from the Legislature, receiving this time two hundred dollars. We are also encouraging tuberculous patients to sleep in tents by themselves, and thus reducing the danger of infecting whole families.

We intend to have a one-day institute during this month under the auspices of the American Tuberculosis Exhibition, Mr. E. G. Routzhahn, director. We shall observe Sunday, April 24, as Tuberculosis Sunday, in accordance with the plan of the National Association for the Study and Prevention of Tuberculosis. The ministers of the county have promised us to preach sermons on tuberculosis on that day, and through the National Association we have sent them literature on the subject.

Assuring you that the Abbeville Society will continue to carry on this most important work, I remain

Yours fraternally,
G. A. NEUFFER, M. D.
Member of Committee for Abbeville County.

Report received as information.

J. L. Dawson, Charleston.
G. A. Neuffer, Abbeville.
Fillmore Moore, Aiken.
W. H. Nardin, Anderson.
N. P. Hoover, Bamberg.
R. C. Kirkland, Barnwell.
M. B. Cope, Beaufort.
J. K. Fairey, Calhoun.
J. G. Pittman, Cherokee (Gaffney.)
Dr. Cox, Chester.
T. E. Wannamaker, Chesterfield.
W. M. Brockington, Clarendon.
Riddick Ackerman, Colleton.
Wm. Eggleston, Darlington.
E. D. Tupper, Dorchester.
R. A. Marsh, Edgefield.
S. Lindsey, Fairfield.
D. M. Michaux, Dillon.
A. M. Brailsford, Marion.
B. G. Gregg, Florence.
Davis Furman, Greenville.
LaBruce Ward, Georgetown.
G. P. Neel, Greenwood.
C. A. Rush, Hampton.
G. P. Norton, Horry.
J. W. Corbett, Kershaw.
T. L. W. Bailey, Laurens.
R. O. McCutcheon, Lee County.
R. W. Timmerman, Lexington.
W. J. Crosland, Marlborough.
P. G. Ellison, Newberry.
E. A. Hines, Seneca.
L. C. Shecut, Orangeburg.
J. L. Bolt, Pickens.
A. E. Boozer, Richland.
D. P. Frontis, Saluda.
L. R. H. Gantt, Spartanburg.
Walter Cheyne, Sumter.
Crown Torrence, Union.
E. T. Kelly, Williamsburg.
W. W. Pressley, York.

Anti-Tuberculosis Committee,
South Carolina Medical Association,
1910.

NEW BUSINESS.

The President: We are now open for the introduction of new business.

Dr. Kollock: Mr. President, there has been a complaint among the members of the Association that the scientific portion of the meetings was neglected, and a great many have thought that this was due to the meetings of the delegates interfering with the scientific portion. They have also thought that perhaps politics entered a good deal into this delay;

that the men were so busy working for those whom they wished to be elected President and for other officers, that the scientific meetings were neglected and that very little was accomplished. The Charleston County Society discussed the subject, with the result that resolutions were passed requesting the change of two sections of the Constitution, and a notice of this action was sent to each county society throughout the State, requesting them to bring the matter before the societies to act upon or consider, so that it might be brought before the House of Delegates for the purpose of changing these two sections. I will read the sections to you, and also read a portion of the report that was made from the Charleston County Society.

Charleston, S. C., December, 1909.

To the President and Members of the Medical Society of South Carolina:

Gentlemen—Your Committee appointed to look into the advisability of memorializing the House of Delegates of our State Association, relative to so changing the constitution that all matters of a business nature be transacted upon the first day of the annual session and thus leave the balance of the time for scientific discussion, the true aim and object of the Association, beg to report that in order to effect these changes, Section 3 of Article 9, on page 3, and also Section 1, of Chapter IV, on page 6, of the constitution, will have to be altered. The first of which now reads as follows:

"Sec. 3. The officers of this Association shall be elected by the House of Delegates on the afternoon of the second day of the Annual Session, but no delegates shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the past two years."

We recommend that this be changed to the following:

"Sec. 3. The officers of this Association shall be elected by the House of Delegates on the afternoon of the first day of the Annual Meeting of the House of Delegates, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who has not been in attendance at one of the last two Annual Meetings of the Association and who has not been a member of the Association for the past two years.

You see that the only change is that the election shall be on the first day of the meeting. That the election would be attended to to-day, and the rest of the meeting left for the scientific section, which is really the most important.

The second change referred to effects Section 1 of Chapter IV, page 6, which now reads as follows:

"Section 1. The House of Delegates shall meet at 2 p. m. on the day before that fixed as the first day of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program."

We recommend that this Section be changed as follows:

"Section 1. The House of Delegates shall meet at 10 a. m. on the day before that fixed as the first day of the Annual Session. It may adjourn from time to time if necessary, but all the regular business, including the election of Officers, must be completed before the general meeting, that this meeting may be uninterruptedly devoted to Scientific Discussion, etc. The order of business shall be arranged as a separate section of the program."

To accomplish these changes, according to the Constitution, as per Article 14, on page 4, which reads as follows:

"The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates registered at any Annual Session, provided, that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component County Society at least two months before the Session at which final action is to be taken."

It will be necessary to present this resolution at one annual meeting and have it voted upon at the next. This is the usual course these matters pursue, but it would mean a delay of two years, and as the matter is of grave importance and requires immediate adjustment, we feel that the same can be accomplished by bringing it before the House of Delegates for *UNANIMOUS CONSENT,* as any organization can by unanimous vote adopt any measure, the precedent in this respect having been accomplished in the State Association, when the change from the old constitution to the new was brought about. This was done by the unanimous action of the Association, and our whole constitution reorganized in accordance with the wishes of the American Medical Association. Your Committee feels that this matter can be arranged in this way, as per authority of Roberts' Rules or Order referred to in Section 3 of Chapter X, on page 15.

If a motion for this change is introduced now it cannot take place until the next annual session.

We have found frequently that when the time came to have our scientific meetings that the House of Delegates was having a meeting, the business before them seemed important, the other meeting had to wait; papers were left out; men became tired of waiting and went home, without reading their papers, or papers were so jumbled together in the hurry to finish the program that little or no discussion took place, and I must say, just among ourselves, that I have been on more than one occasion, and I think others have been, ashamed of our transactions. Good papers have been read and passed by without a word being said upon them, simply because men were anxious to get in their own papers and did not wish to have the delay made by discussing some other man's paper.

Now, if we can transact all the business—and the delegates can—the day before the meeting that would be out of the way. There would be no "log-rolling" for President or for any other office, while the meeting was going on; there would be no temptation to be out drumming for votes, and our transactions would appear in the proper light before the world.

This can be accomplished by changing the hour of meeting of the House of Delegates from 2:00 P. M. of the day before the scientific meeting, to 10 o'clock in the morning. This would be one day's work, and the work could be gotten through with.

If notice is given of this change tonight it will be two years before it will be in working order. By unanimous consent these changes can be made at this meeting and the whole matter settled.

There is a precedent for this in that we changed from the old constitution to the new in order to save delay.

The change suggested is that the meeting of the House of Delegates shall be the day before the scientific meeting, and that the hour shall be at 10 instead of 2 o'clock.

Dr. Hines: Suppose it became necessary for the House of Delegates to have a meeting; if you say all that work shall be through with, what then?

Dr. Kollock: This Association has not so much work that it cannot be finished up. We have a two days' meeting now. If there was just this business to be done on that day, and if we began at 10 o'clock in the morning, we could meet all that day, and if the House of Delegates cannot finish up the business during that time, it seems to me it would take them a week to get through with it. That is certainly plenty of time to get through with the business of the Association, and if each county society will come informed as to the work it has to do, I cannot see why that would not be sufficient time.

Mr. President, I move for the unanimous consent of the Association to take

this matter up for the change to go into effect at this meeting.

Motion put by the President, it is ruled that it is unanimous, and so ordered.

Dr. Kollock: First change, Sec. 3, which I will read:

"Sec. 3. The officers of this Association shall be elected by the House of Delegates on the afternoon of the second day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the past two years."

We recommend that this be changed to the following:

"Sec. 3. The officers of this Association shall be elected by the House of Delegates on the afternoon of the first day of the Annual Meeting of the House of Delegates, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who has not been in attendance at one of the last two Annual Meetings of the Association and who has not been a member of the Association for the past two years."

Dr. Earle: Before that question is put, I ask Dr. Kollock if the reading which he has suggested is not ambiguous? He suggested that the change be made in the afternoon of the first day. I think the intention of Dr. Kollock is probably the afternoon preceding the annual session.

Dr. Kollock: You misunderstood this. Here is the change: The officers of the Association shall be elected by the House of Delegates on the afternoon of the first day of the annual meeting of the House of Delegates.

The President: Are you ready for the question?

Dr. Tripp: It strikes me that we may elect a president or officer who is not present at the meeting.

The President: If he was present last year.

Dr. Tripp: He may not attend the Association, or may not be in South Carolina. We have no assurance that a doctor will be here to-morrow. I think it would be bad practice to elect the President of the South Carolina Medical Association when he was not present at that meeting.

Dr. Weston: It seems to me that we would know positively whether a man whom we desired to elect president would be here or not, and it strikes me that that difficulty is a very slight one.

Dr. Williams: I can readily see what Dr. Kollock is driving at, but I cannot agree with him that a man ought to be in attendance for the last two meetings.

Dr. Kollock: One of the last two meetings.

Dr. Williams: What do you consider the last meeting, now, 1909?

Dr. Kollock: Yes.

Dr. Williams: Then a man has to be in attendance either on the 1908 or 1909 meeting?

Dr. Kollock: Yes.

Dr. Williams: Then if he has not attended one of those meetings, he is ineligible for an officer of this Association?

Another point: It gives the medical centers where we have a large number of physicians the advantage over sparsely settled sections where doctors are few. It gives the medical centers the advantage over the rural districts, because they attend early, and the rural districts cannot get in so early. I believe if a man is in good standing in this Association that he should be in line for office.

Dr. Boyd, of Columbia: I do not see how one can object to the ruling in regard to the past two years. It seems to me that any member of the Association who thinks so little of it as to absent himself from it for two years, from two annual sessions, cannot be deserving of the high office of President. A man certainly ought to be able to attend at least every other annual session. If he arranges it and tries he may be present at every annual session. Now

it is not a question for all the men to be present from the districts, because the members take part in the elections, and when it is set down that the House of Delegates will meet the day before the scientific session, the men from the country districts know they have to be on hand the day before the scientific program. And they have every opportunity of getting there, the same as the men from the town or from the city. So I cannot see why those objections should bear much weight.

Dr. Dwight: I think Dr. Kollock's motion a most admirable one. I cannot see how any harm could come out of it, but I can see how a great deal of good can come out of it. And we should all come here to benefit and uplift the Medical Association. To do that we must have good, live meetings. We must read these papers and they must be discussed, and I can see how an abundance of good can come out of it.

I will just add further that this matter was brought up before my society some time ago—Sumter County—and they did not take any action at the first meeting, and at the second meeting it was brought up again, and they all, after considering it, cheerfully voted unanimously to endorse this motion when it came up, and so instructed their delegate, and the delegate comes from Sumter County instructed to vote for that measure.

Dr. Cheyne: Mr. President, I think I can talk from a practical standpoint in regard to this matter, which I think should be considered. In making up this program year by year, as I have done, it is an exceedingly difficult thing to get matters of business away from the scientific matters; to arrange the hours for a committee meeting so that they would not be in conflict with a paper. The result was last year, in spite of all, on account of dividing up into sections, with the House of Delegates in another place, we had absolutely the most miserable fizzle that we have ever had. And this is looking to the elimination, the sifting down, of these business affairs, and putting them into as short a time as can possibly be done; and even taking it from a business standpoint, we ought to approve of this action and get our business done and over, and then, as in the other societies all over the country, let us go in and join the scientific meeting which we came up here for. And I hope this motion will prevail. I think it would prevail, in another year, but we do not wish to lose that time. We want to get together now and make this a foundation-stone and these matters of business a side issue.

Dr. Outz: I am in favor of Dr. Kollock's motion, and I would make an amendment to that motion, if it is in order. That is for a member to be eligible to office, that he should be a member of this Society for four years instead of two. Because I think the older members of the Society ought to have precedence over the newer members; and I think, too, a man ought to be a member of the Society at least four years in order to become familiar with the run of things and the organization of the Society, and if it is in order, I would like to make that amendment.

Dr. Kollock: I will accept that amendment.

Dr. Tripp: One thing: A man is a member of the South Carolina Society when he is a member of the County Society. The question is to eliminate politics. Our by-laws say that any one soliciting office eliminates that man for that year. We are under the by-laws which the American Medical Association laid down for us, and I think we overstep these bounds if we say a man who has not attended this session shall not hold office. We cannot keep a man from soliciting office. The different meetings at the different times had something to do with the Summerville fiasco, and a man who does not attend this year, we

would not know whether he would attend next year, and it will take a politician who is going to be elected, to walk around and show himself, to be elected president. You will find a man who is not going to be here until day after to-morrow would stand a better show if he attended the meeting of the delegates.

I live forty-two miles from here, and I would have had to leave home Monday morning, early, to get to Laurens. The County Societies are not so benevolent as the State Society.

I make those motions on those lines.

Dr. Burdell: Mr. Chairman, some of the speakers have spoken concerning the meeting at Summerville. Over there we had the great pleasure of holding a meeting in one building, while papers were being read in another building, and we did not have the two sections over there—we had only one section.

Dr. Outz: We not only want to eliminate politics, (I do not know if there are any,) but at the same time we want to elect men who have had some training in our organizations for at least four years. So if the object of the motion is to eliminate politics, I think it is equally as important that we put ourselves in a position where we can get the best men to hold office.

Dr. S. C. Baker: I think the question the doctor has brought up in regard to the four years as a prerequisite to hold office, I think that would hold equally well as to the presidency, but I do not know that it would hold so well for the minor offices—one of the councilors, for instance. I think two years might be sufficient for him, or possibly for the secretary. I think it is very well for the President to be acquainted with the usages of our workings, precedent and all that sort of thing, but some of the other offices it is not quite so important that they be so long a member. It might be well to have that four-year term apply to the President's office and let the others stand at two.

Dr. J. T. Taylor: As to the members of the rural districts getting here on time, I do not see why Dr. Tripp cannot be here on time, if he has only to come forty miles. I got here on time yesterday morning, and had to come over a hundred miles to get here. It works a hardship to have the House of Delegates meet at the same time the scientific session goes on. The delegates have to attend their meeting and miss the scientific session. So instead of being harder on the Delegates, I think the present plan does work a hardship. It takes the men from the rural districts, who are in need of the scientific sessions, and they get no good whatever.

Dr. Kollock: Mr. Chairman, I just want to mention in regard to some of the objections that this change really makes it less stringent than the first. It says that no man shall be elected President who is not in attendance on at least one of the meetings of the Association during the past two years.

Dr. Tripp: That means he could have attended 1908 or 1909?

Dr. Kollock: Yes.

Dr. Tripp: It isn't necessary for him to attend this present meeting?

Dr. Kollock: No.

Dr. Tripp: If we had a good man for President, and that man, at the last minute, had a sick member of his family and could not come, would the House of Delegates hesitate, just on that account, to elect him?

I will not vote, though, if the House is unanimous. I will go with it.

Dr. Kollock: It has been called to my attention that one other rule of the By-Laws has to be changed. *Section 2, Chapter 5,* says:

Election of Officers.

Section 2, Chapter V. The election of officers shall be the first order of business of the House of Delegates after the

reading of the minutes on the afternoon of the second day of the General Session.

If this goes through, instead of the second day of the session, it will have to be changed to the first in the by-laws.

I move then, in the adoption of the first section, if the House is willing to make the motion for the change of the two sections, and Section 2, of the By-Laws, Chapter 5, because the adoption of one means the adoption of all.

Dr. Williams: The only objection I have to it is the wording there: "Shall have been in attendance on one or the other of the last two meetings." You bind him, that he must have attended one of the last two meetings.

Dr. Tripp: And then you bind him to be present at this meeting.

Dr. Kollock: It is less of a hardship than the other.

The President: Much less, because we give him two chances.

Dr. Weston: I hope these resolutions will pass, because the question is whether we shall make this a political or a scientific meeting.

Dr. Brown: I wish to say that since the last two meetings of this Association I have heard quite a number of physicians say that if the Association did not make some changes they never expected to attend it any more. You all know what Summerville was, and some of the preceding meetings were not much better. And I ask the members not to take some trifling exception to the motion made by Dr. Kollock. I believe the men who come here should have the interest of this Association at heart, and I hope this will pass.

Motion put by the President and carried.

Dr. O. B. Mayer: Mr. President, I move that the House of Delegates now go into an election for all the officers, in accordance with the new change in the Constitution.

Motion carried.

Dr. Tripp nominates Dr. Joseph McIntosh, of Columbia, for President.

Dr. Houseal nominates Dr. R. B. Epting, of Greenville, for President.

Dr. Geo. Thompson nominates Dr. Hugh R. Black, of Spartanburg, for President.

Dr. Timmerman nominates Dr. Rolfe E. Hughes, of Laurens, for President.

Dr. Tyson nominates Dr. McLeod, of Florence.

Dr. Weston nominates Dr. J. W. Jervey, of Greenville, for President.

Dr. Burdell moves that the House proceed to the election of one of these nominees.

Motion carried.

Tellers appointed by the President:

Drs. Stone and Cathcart.

Moved by Dr. Baker that the lowest man in each election be dropped. Motion carried.

On the fourth ballot Dr. McIntosh was elected President.

First Vice-President.

Dr. Burdell nominates Dr. J. W. Jervey for First Vice-President and moves that the House make it unanimous.

Motion carried. Dr. Jervey elected First Vice-President.

Second Vice-President.

Dr. Mayer nominates Dr. R. B. Epting for Second Vice-President and moves that the House make it unanimous.

Motion carried. Dr. Epting elected Second Vice-President.

Third Vice-President.

Dr. Baker nominates Dr. Rolfe E. Hughes, of Laurens, and moves that the House make it unanimous.

Motion carried. Dr. Hughes elected Third Vice-President.

Secretary.

Dr. Earle nominates Dr. Edgar A. Hines, of Seneca.

Dr. J. T. Taylor nominates Dr. Walter Cheyne, of Sumter.

Dr. Doyle seconds nomination of Dr. Hines.

Dr. Dwight seconds nomination of Dr. Cheyne.

Motion that nominations be closed.

Motion carried.

Dr. Cathcart appointed Chairman of Committee.

Dr. Hines was elected Secretary.

Treasurer.

Dr. Baker nominates Dr. Aimar for Treasurer, to succeed himself.

Dr. Tripp moves that the House declare a unanimous ballot for Dr. Aimar. Motion carried.

Councilors.

(Second, Fifth and Seventh Districts.)

Dr. Earle nominates Dr. Timmerman.

Dr. Timmerman declines the nomination.

Dr. Earle again nominates Dr. Timmerman.

Dr. Tripp moves that nomination be closed and that unanimous ballot be cast for Dr. Timmerman.

Motion carried.

Dr. Timmerman elected Councilor of the Second District.

Dr. Burdell nominates Dr. M. J. Walker, to succeed Dr. W. B. Cox, as Councilor of the Fifth District.

Dr. Burdell moves that nominations be closed and Secretary instructed to cast unanimous ballot for Dr. Walker.

Motion carried. Dr. M. J. Walker elected Councilor of the Fifth District.

Dr. Dwight nominated by Dr. Baker, to succeed himself, as Councilor of the Seventh District. Dr. Baker also moves that nomination be closed and that unanimous ballot be cast for Dr. Dwight.

Motion carried. Dr. Dwight elected Councilor of the Seventh District.

Delegates to American Medical Association.

Dr. Burdell nominates Dr. Jno L. Dawson, of Charleston.

Dr. Timmerman moves that nominations be closed and that the Secretary cast unanimous ballot for Dr. Dawson, as delegate to the American Medical Association for two years.

Motion carried and it is so ordered.

Dr. E. A. Hines, *ex-officio,* is a delegate.

Medical Examiners.

(To succeed Dr. Wyman, Second District.)

Dr. Tripp moves that Dr. Wyman be nominated to succeed himself.

Dr. Burdell moves that nomination be closed and unanimous ballot be cast for Dr. Wyman.

Motion carried and it is so ordered.

(Fourth District.)

Dr. Tripp moves that Dr. H. L. Shaw be nominated to succeed himself; that unanimous vote be cast for Dr. Shaw.

Motion carried and Secretary so ordered.

(Sixth District.)

Dr. Burdell: I understand that Dr. Napier refuses to hold the position any longer, and I take pleasure in nominating Dr. W. J. Crosland, of Bennettsville. Dr. Burdell misinformed in regard to Dr. Napier, and Dr. Tripp puts in nomination Dr. Napier, to succeed himself. Nomination of Dr. Crosland withdrawn by Dr. Burdell.

Moved by Dr. Williams that nomination be closed, and Secretary ordered to cast unanimous vote for Dr. Napier, to succeed himself.

Motion carried and Dr. Napier elected Councilor of the Sixth District.

(For the State at Large.)

Dr. Weston nominates Dr. A. E. Boozer, to succeed himself, and moves

that Secretary cast unanimous vote for Dr. Boozer.

Motion carried, and Dr. Boozer elected to succeed himself as Councilor for the State at large.

Committee on Scientific Work.

The Secretary *ex-officio* appointed by the President.

Dr. Weston nominates Drs. J. T. Taylor and W. A. Boyd to succeed themselves, and unanimous vote is cast.

Public Policy and Legislation.

Dr. Dwight moves that last year's Committee be retained: Drs. Guerry, Weston and Boyd.

Dr. Guerry is absent. Drs. Weston and Boyd withdraw their names.

Dr. Dwight moves that Dr. Weston be put in nomination. Seconded by several.

Dr. Outz states that he trusts Dr. Weston will accept the nomination, as he has the run of things.

Dr. Weston nominated.

Dr. Guerry, of Columbia, and Dr. Jervey, of Greenville, nominated, and Secretary requested to cast unanimous vote for their election.

Committee on Venereal Disease.

It is moved and seconded that the present committee be re-elected, en masse. Motion carried by unanimous vote and present committee re-elected, as follows:

Drs. T. P. Whaley, Davis Furman, C. W. Barron and President and Secretary *ex-officio*.

Committee on Necrology.

Committee elected:

Drs. T. A. Quattlebaum, S. C. Baker, J. L. Folk.

Dr. Weston: I move that the President of this Association be empowered by this Association to appoint one member from each county in the State, to request the delegate to the Legislature to notify him of any bill that is coming up that will affect the medical laws of the State.

Motion carried.

Dr. Aimar: Mr. President, I wish to announce to the Association that the Treasurer purchased the buttons, at the request of the Councilors, and I have some of the official buttons at room No. 4, if any of the members would like to obtain them.

President here adjourned the meeting until 8:30 P. M.

TUESDAY EVENING.

Called to order by the President.

First business the election of alternates to the American Medical Association.

Dr. Timmerman nominates Dr. Curran B. Earle, of Greenville.

Dr. Jervey nominates Dr. Cathcart, of Charleston.

Dr. Timmerman nominates Dr. Thomas Black, of Spartanburg.

Dr. Mayer nominates Dr. R. A. Marsh, of Edgefield.

Dr. Williams moves that nominations be closed and that the Secretary be requested to cast unanimous votes for Drs. Marsh and Cathcart, as alternates to the American Medical Association

Motion carried.

REPORT OF THE SIMMS MEMORIAL COMMITTEE.

(By Dr. S. C. Baker, Secretary.)

Mr. President and Gentlemen:

The Memorial Committee chosen by this Association at Summerville, consisting of Drs. T. Grange Simons, C. W. Kollock and myself, organized by electing Dr. Simons, chairman; Dr. Kollock, vice-chairman, and Dr. S. C. Baker, secretary and treasurer.

We looked into this matter of the Sims monument, and got in correspondence with Mr. F. W. Ruckstuhl,

of New York, the sculptor of the Hampton Monument in Columbia and of the Calhoun statue, recently unveiled in Washington. He has also been chosen as sculptor for the monument to the women of the Confederacy, soon to be erected in Columbia.

Mr. Ruckstuhl came down to Columbia to see about this work, and by request he came over to Sumter to see me, and then went on to Charleston and saw the other two members of the Committee—Drs. Simons and Kollock. We discussed the matter thoroughly with Mr. Ruckstuhl and came to what seemed to be a very satisfactory understanding. The gist of it was that he would make a statue a little over life-size for $9,000. The Sims statue in New York cost about $17,000. In first writing to Mr. Ruckstuhl I asked him if he could make one like the statue in New York, which was the first statue erected to a medical man in America, and one of the first in the world. He did not think much of that statue, from an artistic viewpoint. He says that it displayed very good workmanship, so far as it goes, but it doesn't convey the idea as to whom or for what that statue stands. That it looks like a good, staid business man. He stands there dressed in a sombre business suit, and looks like a merchant, a politician or any good citizen, but there is nothing distinctive as a statue. Anybody looking at it would say "who is that, and what did he do?" And he went on to explain that a statue, as a work of art, must mean something more than that. You should not have to read the label on it to see what it stands for. He stated that there were several statues in Paris representing medical men. One man is standing by a table, with an operating gown on, with some animal in front of him being vivisected. You don't have to ask what that man's occupation is; it stands out at once.

He said if we engage him to make this statue that he guarantees it will embody a great deal more than the New York statue does.

He has, of course, considerable reputation behind him—the Hampton and Calhoun monuments, and a very beautiful monument in Baltimore to the sailors of the Confederacy and several others.

Mr. Ruckstuhl said if we could engage him within the next twelve months that he would guarantee to do this work for $9,000, and that he would give us a bronze statue, to be placed on a pedestal of red Italian granite on the capital grounds in Columbia, and he thinks the Committee had better attempt to raise $10,000, thus allowing a surplus of $1,000 for the unveiling ceremonies. He put it at $9,000, as he would be in Paris working on the woman's monument for a year and his expenses there would be less. After that time he would be back in America. He says after that time he would have to charge $10,000, because getting models, etc., is very much more expensive in New York than in Paris. So it means $1,000 saved if we can complete a contract with him within the next twelve months.

Mr. Ruckstuhl says that an artist ought to have at least two years to complete the work, and that three years are better than two, because the longer time gives him a beter opportunity to work out the idea and the embodiment of it grows upon the sculptor.

This being the case, there was little time to lose. The Sims centennial is 1913—three years hence. We had no time to report back to the Association for instructions, but the Committee thought it best to go ahead and see what they could do towards raising the money. The plan we formulated was to go about it in a similar way to that adopted for raising the money for the woman's monument. We drafted a bill asking for $5,000, and had it introduced in the Legislature. We asked that the Legislature appropriate the sum of $5,000 towards the work, provided the State Medical

Association raise an equal amount. We got Senator Williams, of Lancaster County—the county in which Sims was born—to introduce the bill in the Senate, and we got Mr. Mendall Smith, of Camden, Kershaw County, to introduce it in the House. We appeared before the finance committee of the Senate, together with the legislative committee—Drs. Guerry, Weston and Boyd—and explained to them how the State ought to honor Sims, and, in so doing, honor itself; and they gave us a favorable report, and the bill passed the Senate, but we were rather late in getting the bill before the Legislature, and Mr. Smith wrote me there was so much other work before the House that if he tried to force this bill at this time he was afraid that it would fail, and under the circumstances he thought it would be better to let it go over to the next Legislature, and that having had it favorably reported to the finance committee of the Senate, and passed by the Senate, that we had a better chance of having it passed by the whole Legislature at the next meeting. He stated that he expected to stand for re-election to the next House, and if elected he would lend his best efforts to get this bill through.

The thanks of this Association are due to Messrs. Williams and Smith for the work they have already done for us in support of this bill, and I hope that the members will not forget them.

Now our further plan was this: If the Legislature should give us $5,000 there would yet be $5,000 to be raised by the State Association. We believe that the State Association, from its membership of nearly eight hundred, can raise $2,500 easily, and if we then go before the Women's Clubs of the State—as Sims' work was for the women of the country—they will assist in the work and raise the other $2,500. If the women can be induced to take up this work, I think they could be induced to raise this money easily—not necessarily from among themselves, but by soliciting from their husbands and friends, and I am satisfied the Association can raise the other $2,500. It would only mean a little over three dollars per member for the Association's share. One member of this Association has told me that he would gladly give me as much as $100, and two or three others as much as $25. This is a work that we ought to try to carry through. Sims has done a great work and should be honored by this State.

I saw a clipping in the paper the other day that the State of Georgia was to unveil a monument to Crawford W. Long, at Jefferson, Ga., on the day after to-morrow, and they will honor him and themselves by unveiling a monument to him. And certainly Sims is deserving of more honor. Not that I wish to take anything from Long, because he, by his discovery of ether anesthesia, has conferred a great boon upon humanity, but Sims has conferred a greater; he has not discovered only but he has wrought out a new department of medicine.

Mr. Ruckstuhl says that he will begin work on the monument as soon as he is assured of having half the money. Of course, it is understood that he will not deliver the monument until the whole sum is paid.

Your committee feels that it has done all that it could up to the present.

Now it is up to the Association to say what it will do further in this matter.

The President: What is the pleasure of the House, gentlemen?

Dr. Weston: I would like to know what Dr. Baker would like us to do in the matter.

Dr. Baker: I scarcely know, Mr. President. I suppose one thing would be to ask the Association to endorse the Committee up to this point. Another step might be the appointment of a legislative committee in each county and let these committees see the members of the Legislature from their respective counties and ask them to support the bill

when it comes up at the next session of the Legislature. Next, we should appoint each county society a committee of the whole, to apportion, among their membership, the amount of money we wish to raise. If the Association favors the committee's plan of raising the additional $5,000, the Committee should be authorized to apportion the same, according to membership in the different county societies, and the Association should ask that the several societies attempt to raise that money within their respective districts. Of course, the county societies need not raise the money from their membership exclusively, though it will only be a little over three dollars per member. They can solicit subscriptions from the citizens generally, or in any way they see fit, but they would have to count on the raising of about $3.50 per capita of Association membership in each county. If each county was requested to raise that amount, and also to use their influence upon the members of their legislative delegations, to have them vote for the appropriation of the other money by the Legislature, I believe that we can get the money up without any great trouble. I suppose a motion along these lines would be the proper thing.

Dr. Dwight: The State newspaper started out a movement to this effect for the erection of the woman's monument, and I think, if it isn't precipitating things, I would like to make a motion to the effect that the editor of our Journal be the one to receive these subscriptions and keep same, or we could appoint some one else to do so. If the Journal would publish all voluntary subscriptions as they are made it would reach all the medical men, certainly, and then if they want to get the State and News and Courier to lend their assistance by way of supplement, these papers could also receive subscriptions, but I believe that we ought to try in some way to get at the people and let them have an opportunity to donate voluntary subscriptions.

Dr. Robert Wilson: Mr. President, I think it would be well to send a circular letter to each member of the Association and let him subscribe what he wishes, not stating that he is expected to give $3, but urging it upon his patriotism to give as much as he can, and further ask that each member get a friend to give another subscription at least equal to his own. If the member, for example, gives $5, he can raise another $5 from his friends, and I believe that in this way among ourselves we can raise almost the entire amount that Dr. Baker wants.

Motion stated by the President as made by Dr. Wilson.

Dr. Walter Cheyne: I would like to make this motion by way of amendment:

That the Committee have its treasurer to work these subscriptions up among the members of this body. They are the men interested, and I think it is better to keep the funds in their own hands and let the subscriptions be sent to the treasurer of their committee, and I think that it would be well to write, in addition, to each president of each county society and ask him personally to take this up with his society and report back to them. This is a very important matter. It is a matter of pride, and in doing this work we honor ourselves as has been said. I think it is a good work, and we should all work together. I think also that the expenses of this committee—and there will be expenses when it comes to letter-writing, postage and typewriting—should be paid by the Association.

Dr. Wilson, in answer to the President's question whether he accepted Dr. Cheyne's amendment, stated that it was rather lengthy. Dr. Cheyne, however, insisted that the expense account was important, because it was a practical matter.

The President: Dr. Wilson's motion is before the House.

Dr. Baker: I would like to make the amendment to the motion of Dr. Wilson that we embody Dr. Dwight's suggestion that the names be published and donations of subscribers. Personally, I think I would prefer that the money forthcoming be turned over to our State Association Treasurer, to be kept by him as a special fund.

Dr. Weston: It would seem to me very important that some hustling man be appointed to look after this matter, because what is everybody's business is nobody's business.

The President: Dr. Wilson's motion is that this committee write a letter to each member, begging them to contribute all in their power and to get an equal amount from their friends; and Dr. Baker's amendment is to send in the names to the Journal, with the amount contributed, so as to keep track of same.

Motions carried.

Dr. Baker: Now in order to get this matter into a little more definite shape, it should be remembered that the Monument Committee was appointed to look into this matter of erecting a monument and was instructed to report back to the Association at this time. This we have now done, and I think in addition to Dr. Wilson's motion, it would be well for the Association to say, with the information before it, that it desires to go forward with the erection of this monument and takes the method proposed by Dr. Wilson's motion of raising the funds.

Dr. Aimar: I move, Mr. President, that the report and suggestions of the committee as outlined, he accepted in full, and that the thanks of the Association be extended to them and that the Committee be continued with the same membership in force until the next meeting.

Motion carried.

Dr. Baker: Mr. President, as a matter of information, I have a rough draft of the bill introduced before the Legislature, and if the Association would like for me to read it I will be glad to do so; it is short. It is drawn along the same lines as the bill for the woman's monument.

The President: We will be glad to hear the bill read.

Dr. Baker, (reading):

An Act to provide for the erection of a statue of Dr. J. Marion Sims, a native of Lancaster County, South Carolina, upon the State House grounds, Columbia.

Section 1. Be it enacted by the General Assembly of the State of South Carolina, That the sum of five thousand dollars be appropriated, to be used in connection with an equal sum to be raised by the members of the South Carolina Medical Association and to become available only when such equal sum has been raised and deposited with the commission hereinafter provided for, for the erection upon the State House grounds in Columbia, of a statue of heroic size of Dr. J. Marion Sims, who was born in Lancaster County, South Carolina, January 25th, 1813, and who, by his work as a surgeon and gynecologist, has brought renown not only to his native County and State but to America as well.

Sec. 2. That a commission of three male citizens of South Carolina be appointed by the Governor, upon nomination by the South Carolina Medical Association, to take charge of the funds hereinbefore appropriated when available, and also of all other contributions which may be made to them for the purposes of this Act, and shall select the location and inscription, and contract for and superintend the erection of the statue.

The President stated that if it became necessary for this committee to go to Columbia to lobby for the bill again, the expenses would have to be left to its patriotism.

Report by Dr. Gambrell, Chairman Committee on Secretary's report.

COMMITTEE ON SECRETARY'S REPORT.

Dr. C. C. Gambrell, Chairman:

I desire to say that the Councilors will bring in a report on the subjects mentioned by the Secretary, and we approve the suggestions made in that re-

port. This report was adopted by the House of Delegates.

Moved by Dr. Earle that report be adopted.

Motion carried.

Report by Dr. Earle, Chairman Committee appointed to report upon the suggestions of the Medical Examiners.

COMMITTEE ON MEDICAL EXAMINERS' REPORT.

Your Commitee recommend that the suggestions of the Secretary of the Board of Medical Examiners be adopted and that they be brought to the attention of the Committee on Public Policy and Legislation.

C. B. EARLE,
WM. WESTON,
THEODORE STONE.

Report adopted.

MISCELLANEOUS BUSINESS.

Dr. Burdell: Mr. President, I wish to offer a resolution that the Secretary of this Society be instructed to send the greetings and best wishes of the society to Dr. A. A. Moore, of Camden. Dr. Moore told me before the Anderson meeting, that he had attended thirty-five meetings of the society without a break. He was a member of the State Board of Health for years; he was at one time President of the Association. Dr. Moore is in very feeble health and his failure to attend the two last meetings has been on account of his health. We all know him and love him.

Motion carried and Secretary so ordered.

Report by Dr. Mayer, Chairman of the Council:

This report is made in compliance with the constitutional requirement that the Council should make a report each year to the House of Delegates.

The general condition of the profession, as well as the society work, is found in the reports which each councilor makes of the condition of his district.

The finances of the Association is shown in the treasurer's report. This is appended. The report of the editor of the Journal shows the condition of it. This report is also appended.

The profession is losing much of the value of the Journal by not having the minutes of the County Society meetings and papers which are read and discussed.

These will prove of much benefit to the profession generally and the secretary of each county society should not fail to send them to the Journal so that they can be regularly published.

The Council feels that the most important subject they can call to your attention is that of the county society. This is the foundation upon which the State Association is erected and upon which the A. M. A. stands. How useful the county societies could be to the individual members of this profession in every county is so great that no one can estimate it. It is a source of much regret to the Council that this fact is not realized by the profession.

The accomplishment of the end for which the new organization of the medical profession in America was designed will not be realized until practically every member of the profession who is eligible has been gathered into the county societies and their influence combined for the betterment of their brethren of the profession.

The profession must not leave this important matter entirely to the Councilor of their district, for they cannot do more than visit you often and urge you to become part of the organic body of our profession where you can be of service. to them and where they may be of benefit to you.

The Council also urges every member of the profession to study the constitution of the Association as well as that of the county societies. This will arouse much interest in the science of medicine

as well as in the membership of the profession.

The code of ethics should be studied by every physician. It would be a surprise to you to know how few members of our profession have ever read a copy of our code. If they have not read it, how can they know when with whom they are breaking it.

We recommend to the House of Delegates that each county society that has not already obtained a charter be required to do so during the coming year and that no delegate be received at the next annual meeting from any society that has not received a charter.

Moved by Dr. Kollock that report be accepted and spread upon the minutes.

Dr. Mayer: When you adopt that resolution: "We recommend to the House of Delegates that each county society that has not already obtained a charter be required to do so during the coming year, and that no delegate be received at the next annual meeting from any society that has not received a charter—it will exclude the members from the county societies who have no charter from this society.

Dr. Kollock: I move that this be received as information and that the suggestions as recommended by the Council, read by Dr. Mayer, be adopted.

Seconded by several.

The President: In calling this to your attention it means this: that every component part of this Association that has not a charter will not be recognized at the next meeting, so it behooves you to go home at once and see if you have a charter, and if not, don't expect to get in here next year.

Dr. Kollock's motion carried.

Communication from Dr. McCormack, read by Dr. Mayer, calling attention to the following bill introduced by Mr. Owen, Senator from Oklahoma, and asking the support of the bill by the medical profession:

[S. 6049, Sixty-first Congress, second session.]

In the Senate of the United States. February 1, 1910. Mr. Owen introduced the following bill, which was read twice and referred to the Committee on Public Health and National Quarantine:

A bill establishing a department of public health, and for other purposes.

Be it enacted, etc., That there is hereby established a department of public health under the supervision of the secretary of public health, who shall be appointed by the President a Cabinet officer, by and with the consent of the Senate, at a salary of $12,000 per annum, with like tenure of office of other Cabinet officers.

Sec. 2. That all departments and bureaus belonging to any department, excepting the Department of War and the Department of the Navy, affecting the medical, surgical, biological, or sanitary service, or any questions relative thereto, shall be combined in one department, to be known as the department of public health, particularly including therein the Bureau of Public Health and Marine Hospital Service, the medical officers of the Revenue-Cutter Service, the medical referee, the assistant medical referee and surgeons and examiners of the Pension Office; all physicians and medical officers in the service of the Indian Bureau of the Department of the Interior at old soldiers' homes, at the Government Hospital for the Insane, and the Freedman's Hospital and other hospitals of the United States; the Bureau of Entomology, the Bureau of Chemistry and of Animal Industry of the Department of Agriculture; the hospitals of the Immigration Bureau of the Department of Commerce and Labor; the emergency relief in the Government Printing Office, and every other agency of the United States for the protection of the health of the people of the United States, or of animal life, be, and are hereby transferred to the department of public health, which shall hereafter exercise exclusive jurisdiction and supervision thereof.

Sec. 3. That the official records, papers, furniture, fixtures, and all matters, all property of any kind or description pertaining to the business of any such bureau, office, department, or branch of the public service is hereby transferred to the department of public health.

Sec. 4. That the secretary of public health shall have supervision over the department of public health, and shall be assisted by an assistant secretary of public health, to be appointed by the President, by—etc.

Dr. Mayer: As you understand, this is to create a department of health. The

matter has been alluded to and recommended at several meetings of this society, and I think it would be right and proper to take up that matter, and I offer this resolution:

"We recommend most heartily that the South Carolina Medical Association put itself on record as being most heartily in favor of the formation of a National Department of Health, as exemplified in the Owen Bill, and each physician in South Carolina is asked to get the support of our Senators and Congressmen in his district to aid in the passage of this law.

The Council adopted this resolution to-day and asked that it be read to-night.

"We recommend most heartily that the South Carolina Medical Association put itself on record as being most heartily in favor of the formation of a National Department of Health, as exemplified in the Owen Bill, and each physician in South Carolina is asked to get the support of our Senators and Congressmen in his district to aid in the passage of this law.

Motion carried.

The President: It is requested that every member present here to-night register in the registration book at the head of the stairs. If he has not done so he may not be able to hold office in the future.

Dr. L. Rosa H. Gantt, State Secretary Public Health Educational Committee of the A. M. A., read the following report:

AMERICAN MEDICAL ASSOCIATION.

Public Health Education Committee.

Object: To disseminate accurate information, concerning the nature and prevention of disease, and the general hygienic welfare of the people.

Plan of Work for 1910.

AMERICAN MEDICAL ASSOCIATION.

Public Health Education Committee.

This plan of work is the result of the following resolution unanimously passed by the House of Delegates of the American Medical Association at their annual meeting held in June, 1909, in Atlantic City, N. J.

"Whereas, The American Medical Association, not only as one of its declared purposes, but by numerous lines of activity, many of them connected with the Section on Hygiene and Sanitary Science, stands committed to the education of the public with respect to the nature and prevention of disease, and

Whereas, The demand for such popular education with respect to tuberculosis, cancer, typhoid fever, and other decimating diseases has become urgent; therefore be it

* * *

Resolved, that the women physician members of the American Medical Association be, and they are hereby, requested to take the initiative individually in their respective associations in the organization of educational committees to act through women's clubs, mothers' associations and other similar bodies, for the dissemination of accurate information touching these subjects among the people, and that they be requested to submit to the House of Delegates a yearly report of such work, and elect from among their number a committee to take charge of the same.

In accordance with this resolution, physicians from all over the United States held a meeting in New York City, July 20, 1909, when the Public Health Education Committee of the American Medical Association was formed and officers were elected. Many physicians, both men and women, who have already done a great deal of work individually along these lines have now promised, through this committee, to give gratuitously, from time to time, during the ensuing year, as they may be requested to do so by women's clubs, mothers' and teachers' organizations, Young Women's Christian Associations, church and social settlement clubs, etc., addresses upon the following subjects:

1. The cause and prevention of ordinary colds.
2. The value of pure food and the physiology of digestion.
3. The chemistry and economic value of food.
4. The care of the food at home.
5. The relation of pure water to the public health.
6. Water borne diseases.
7. The value of exercise and rest to the public health.
8. The causes and prevention of nervous exhaustion and prostration.
9. The use and abuse of stimulants and narcotics.
10. The prevention and cure of tuberculosis.
11. The air we breathe and the value of ventilation.
12. The relation of flies, mosquitoes, water bugs and other insects to public health.

13. Pure milk and infant hygiene.
14. The hygienic management of nervous children.
15. The relation of teeth to good health.
16. Prevention of some of the commoner skin diseases.
17. The importance of early diagnosis and treatment of adenoids.
18. The causes and prevention of deafness.
19. The prevention of Fourth of July injuries and tetanus.
20. The prevention of acquired deformities.
21. The causes and prevention of blindness.
22. The causes and results of eye-strain.
23. How to instruct children regarding the origin of life.
24. The responsibility of girlhood to motherhood in the care of the health during the menstrual period.
25. Pregnancy and the menopause.
26. The value of early diagnosis of cancer in women.
27. The responsibility of boyhood to fatherhood.
28. Social hygiene—how parents may protect their sons and daughters from immorality.

Etc. Other topics which may arise concerning public health.

In order to simplify this work, it is suggested that each club or organization wishing one or more of the above lectures on the Prevention of Disease, form a Hygiene Committee whose duty it shall be to arrange the date, choose the topic or topics and communicate with L. Rosa H. Gantt, M. D., Spartanburg, S. C., of the Public Health Education Committee, who will upon receiving such requests ascertain which of the physicians, who have promised this public service may be able to arrange their engagements to be free to deliver the address or addresses. As the constant demands of private and charity practice leave the physician little time for outside work, it is hoped smaller clubs will have joint meetings in order that this work, designed to lessen suffering and save life, may be as far-reaching as possible.

Throughout the United States such excellent work has been done to assist many of the Boards of Health, and also independently, by public-spirited men and women in work for pure milk, clean streets, prevention of tuberculosis, etc., etc., that we hope to have their hearty coöperation in this wider work for the public good.

L. ROSA H. GANTT, M. D., State Secretary of the Public Health Educational Committee of the American Medical Association.

CENTRAL COMMITTEE.

Hon. Chairman, R. R. A. Dolley, M. D., Rochester, N. Y.
R. S. Morton, M. D., Chairman New York City.
E. Garrigue, M. D., Sec. New York City.
A. Gregory, M. D., Treas. New York City.
L. H. South, M. D., Kentucky.
S. C. Buckley, M. D., Illinois.
R. T. Bullard, M. D., California.
A. L. Hamilton, M. D., Massachusetts.
M. Holliday, M. D., Texas.
L. L. Liebhardt, M. D., Colorado.

* * * * *

The following is a suggestion of the form in which our work is to be presented by our County Chairmen throughout the States before their County Medical Societies, and with suitable changes by the State Secretaries before their State Medical Societies:

Mr. President and Members of the South Carolina Medical Association:

I have been asked to come before you to present the report and plan of work of the Public Health Education Committee of the American Medical Association.

The resolution creating this Committee was passed unanimously by the House of Delegates of the American Medical Association at its last meeting in Atlantic City, June, 1909.

A meeting of the women physicians of the American Medical Association was called in New York City, July 20th. Women from all over the United States were present and formulated plans for work in women's clubs, Young Women's Christian Associations, mothers' and teachers' clubs, social settlement clubs, etc., and work is now going forward in Arizona, Connecticut, Georgia, Indiana, Massachusetts, Michigan, Minnesota, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, South Carolina, Washington, Wyoming, Hawaii, and the district of Columbia.

The plan of work is to affiliate through the Committee the large amount of public health education now being done individually and by scattered groups of women, to concentrate this work under the American Medical Association, giving unity of purpose and coöperation of effort to all work along these lines for the public good.

This work is directed by a Central Committee composed of women physicians from different sections of the United States, one from each of the following: Colorado, Texas, California, Illinois, Kentucky, Massachusetts.

The Secretary, Treasurer, and Chairman are from New York City. The Honorary Chairman is Dr. Sarah R. Adamson Dolley, of Rochester, N. Y., the oldest woman physician in America, having graduated in 1851.

The work is subdivided under State Secretaries and still further under County Chairmen, whose duty it is to learn what physicians, both men and women, will be willing to deliver lectures on the following subjects:

1. The cause and prevention of ordinary colds.
2. The value of pure food and the physiology of digestion.
3. The chemistry and economic value of food.
4. The care of the food in the home.
5. The relation of pure water to the public health.
6. The water borne diseases.
7. The value of exercise and rest to the public health.
8. The causes and prevention of nervous exhaustion and prostration.
9. The use and abuse of stimulants and narcotics.
10. The importance of the standardization of drugs.
11. The prevention and cure of tuberculosis.
12. The air we breathe and the value of ventilation.
13. The relation of flies, mosquitoes and other insects to public health.
14. The care of the sick at home.
15. Pure milk and infant hygiene.
16. The hygienic management of nervous children.
17. The prevention of acquired deformities.
18. The prevention of Fourth of July injuries and tetanus.
19. The relation of teeth to good health.
20. The prevention of diseases transmissible from animals to man.
21. The importance of the early diagnosis and treatment of adenoids.
22. The causes and prevention of deafness.
23. The causes and prevention of blindness.
24. The causes and result of eye-strain.
25. The value of vaccination and serum-therapy.
26. The need of medical inspection in the public schools.
27. The advisability of a National Board of Health.
28. How to instruct children concerning the origin of life.

(This lecture to be presented before teachers and mothers.)

29. The care of the health during the menstrual period.
30. The responsibility of girlhood to motherhood.
31. Pregnancy and the menopause.
32. The value of the early diagnosis of cancer in women.
33. The value of animal experimentation in surgery, in nutrition, in diabetes, in nervous diseases in tuberculosis and in infectious diseases.
34. The responsibility of boyhood to fatherhood.
35. The prevalence and prevention of venereal diseases.
36. Social Hygiene. How parents may protect their sons and daughters from immorality.
37. Etc. Other topics which may arise concerning Public Health.

Women physicians as members of women's clubs, etc, come in contact with a vast number of women, and we have learned that what Dr. George W. Wagoner, of Johnstown, Pa., said lately in his presidential address before the Medical Society of the State of Pennsylvania is true, namely: "Doctors are losing the confidence of and receiving criticism from the laity." This is largely due to the fact that throughout the country the public is being exploited by pseudo-scientists who affirm that we, the so-called "drug-doctors," are commercially interested in keeping the people ill, while they are working to prevent disease.

The laity is much interested in Public Health education. The psychological moment has come, and it would be a serious reflection upon our profession if we did not now educate the public to a thorough appreciation of the position of the doctors as the protector of the health of the community.

Instead of doing this in individual isolated cases, through a national movement from within the American Medical Association, we emphasize the fact that this desire to educate the public for the prevention of disease is general among physicians, and I come before you as Secretary for South Carolina of this Committee to ask your hearty co-operation as individuals and as members of the Medical Society of the State of South Carolina, in this work of service of our country.

We have received letters expressing hearty interest from Chairmen of other Committees of the A. M. A. and other representative physicians all over the United States, expressing their satisfaction in the plan of work outlined by this Committee and their desire

to co-operate in every way for mutual service to humanity. Among these were letters from Col. William G. Gorgas, President of the A. M. A.; Dr. Prince A. Morrow, Chairman of the Executive Committee of the A. M. A., Section on Preventive Medicine and Public Health; Dr. Frank Van Fleet, New York, Representative of the A. M. A. Board of Public Instruction on Medical Subjects; Dr. Samuel C. Dixon, Commissioner of Health of Pennsylvania; Dr. William Brumby, Health Officer of Texas; Dr. Gardner T. Swarts, Health Officer of Rhode Island; Dr. John L. Dawson, President of the South Carolina Medical Association; Dr C. F. Williams, Health Officer of South Carolina; (submit plan of work to prominent men in your locality, especially health officers, and if they are interested, add their names to this list to carry weight locally;) Dr. Baylis H. Earle, of the U. S. M. H. and P. H. Service; Dr. Thomas Darlington, Commissioner of Health, New York City; Dr. Harvey W. Cushing, of Baltimore; Dr. William J. Mayo, of Rochester, Minn.; Dr. S. McCuen Smith, of Philadelphia; Dr. Clarence Wheaton, Dr. William H. Wilder, Dr. Geo. C. Shambeaugh, Dr. Chas. W. Robertson and Dean Wells, of the University of Chicago; Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry of the U. S. Department of Agriculture; Dr. Ried Hunt and Dr. George M. Kober, of Washington, D. C.; Dr. F. Park Lewis, Chairman of the A. M. A. Committee on Ophthalmia Neonatorum; Dr. William H. Welch, of Johns Hopkins University; Dr. W. Sohier Bryant, Dr. O. H. Rogers, Dr. Simon Flexner and Dr. Pedersen, of New York; Dr. Crothers, of Connecticut; Dr. J. N. McCormack, Chairman of the A. M. A. Committee on Organization; Dr. C. A. L. Reed, Chairman of the A. M. A. Committee on Legislation; Dr. Frederick P. Henry, President of the Philadelphia County Medical Society; Dr. Milton J. Rosenau, formerly of the Public Health Service of the United States, now Professor of Harvard, and many others.

A Sub-Committee on Medical Literature and a Sub-Committee on Affiliated Public Work will be formed in every State.

In order to meet the many requests which are made for these lectures we need your co-operation, and we urge that the names and addresses of all who are willing to speak on any of the above topics, together with the subjects they will present, should be sent to L. Rosa H. Gantt, Spartanburg, S. C.

(Insert the name and address of your County Chairman.)

We hope through your co-operation in the Medical Society of the State of South Carolina to make this the leading State in this national movement for lessening human suffering and saving human life.

Respectfully submitted,

L. ROSA H. GANTT,
State Secretary.

The President: What action would you like us to take, Dr. Gantt, in regard to the report you have just read?

Dr. Gantt: I suppose a motion in regard to it would be in order. I would be glad if a committee could be appointed to co-operate in this work, and to get the names of the various committees who are going to help and deliver lectures throughout the State.

Dr. Kollock: Mr. President, I will make a motion, just for the sake of having it discussed, that the presidents of all county societies be appointed a committee to arrange to have lectures delivered by members of their societies upon any of these subjects that they may elect.

Dr. Williams, of Spartanburg: I think it should emanate from some source in this Association. Who is going to refer this back to the county society?

The President: This Association, I understand.

Dr. Williams: I understand Dr. Gantt to request that this be handled by a committee? I would suggest that the matter be handled by a committee from this Association.

The President: A committee of three?

Dr. Cheyne: I would suggest that Dr. Gantt be made chairman of this committee, and that she be given power to appoint two others to work with her, with the approval of the South Carolina Medical Association, and that she be empowered to take such measures through that committee as is deemed best by that committee for the execution of the work which she is commencing.

The President: The motion is that a committee be appointed, of which Dr. Gantt is Chairman, she to appoint two

other members to take up this matter with the various county secretaries to give such lectures on such subjects as may be desired by Dr. Gantt.

Motion carried.

Dr. Kollock: Some years ago—I think it was in 1895—the American Ophthalmological Society was very much interested in the subject of the proper treatment of the eyes of the new born children who were affected by ophthalmia neonatorum, and they appointed a committee of one from each State who should bring the matter before the State Medical Associations and try to get them to recommend that the Legislatures of the different States should pass a law for the prevention of the increase of blindness—that is, the proper handling of ophthalmia in new-born infants. A number of States passed such laws. I was appointed to bring the matter before this Association, which in turn appointed a committee of three, of which I was chairman, to go before the Legislature and try to get a bill passed similar to that of other States. This bill was modeled after the law of the State of New York. I went before the medical committees of the Senate and the House. Now the bill was received with a great deal of doubt, I may say, as to the good of it, not only by the laymen of the committees, but by the physicians, but finally they agreed to report it favorably.

When it came before the House it was very much ridiculed, and it was known as "Bacot's sore-eyed babies' bill"—Mr. Bacot from Charleston having introduced it.

Bill 107 was finally passed:

An Act relating to the Care of Infants With Diseases of the Eye.

Section 1. Be it enacted by the General Assembly of the State of South Carolina, That should one or both eyes of an infant become reddened or inflamed at any time after birth, it shall be the duty of the midwife or nurse or person having charge of said infant to report the condition of the eyes at once to the local Board of Health of the city or town in which the parents of the infant reside.

Section 2. That the Secretary of State shall cause a sufficient number of copies of this Act to be printed, and supply the same to Health Officers and Health Committees, whose duty it shall be to furnish a copy to each person who is known to act as midwife or nurse in the cities and towns for which they have been appointed.

Section 3. Any failure to comply with the provisions of this Act shall be punishable by a fine not to exceed twenty-five dollars or imprisonment not to exceed one month, or both.

Section 4. This Act shall not apply to towns or cities of less than one thousand inhabitants.

This Bill was passed in 1896, and no Secretary of State since then has had it printed and sent to any Health Officer or Health Committee.

This is the first thing that should be noticed.

Let us read the fourth section: "This Act shall not apply to towns or cities of less than one thousand inhabitants."

This is the section I would like to see the Legislature amend. In other words, gentlemen, that committee said that they did not have gonorrhoea in the country.

Now I wish to move that this matter be brought to the attention of the Legislative Committee, and that they have this Act so amended that it shall apply to every section of the State alike, by having *Section 4* stricken out.

I may say just here that I think the law should read, instead of "reporting the condition of the eyes at once to the local Board of Health of the city or town in which the parents of the infant reside," that this shall be reported to some qualified practitioner of medicine. Of course, this does not mean that he shall be obliged to go attended, but if a nurse reports that such a case exists, she is very apt to get some one to attend it.

Dr. Timmerman: Do you mean to

call upon the Secretary of State to see why he does not distribute that Act?

Dr. Kollock: I think that it would only be necessary to call his attention to the law, and that he would carry it out.

Dr. Outz: Where there are no local Boards of Health to whom could this matter be referred or reported? I believe every county has a county physician. We have one at Edgefield. I would like to suggest that where there is no Board of Health, that that matter might be reported to the county physician.

Dr. Kollock accepted the amendment —"The county physician."

The President: Dr. Kollock's motion is that this matter be referred to the Legislative Committee, and that we try to have that offending clause stricken out and instead of "Board of Health" substitute "Board of Health or County Physician."

Dr. Williams: Suppose, Mr. President, a case of ophthalmia should occur thirty miles from me. I am the officer in my county. Would I have to go the thirty miles?

The President: No. Turn it over to the nearest doctor.

The Bill now reads:

Section 1. Be it enacted by the General Assembly of the State of South Carolina, That should one or both eyes of an infant become reddened or inflamed at any time after birth, it shall be the duty of the midwife or nurse or person having charge of said infant to report the condition of the eyes at once to the local Board of Health or County Physician of the community in which the parents of the infant reside.

Sections 2 and 3 to remain unchanged, and Section 4 to be stricken out.

Invitations accepted from the Charleston County Medical Society to hold the next annual meeting at Charleston, on the third Wednesday of next April.

Upon motion of Dr. Kollock, the President adjourned the House until April, 1911, the third Wednesday.

EDITORIAL.

BERIBERI.

The two papers, by Doctors A. J. Jervey and F. W. Butler, on Beriberi, in this issue call attention in rather a striking way to the presence, so often ignored, of the so-called tropical disease in this country. The history of this particular disease in the low country of South Carolina is interesting and instructive, both as a study of a little known disease here and as an example of how frequently we overlook conditions which exist around us. The disease has, without doubt, been with us many years, and from time to time we have been hearing of epidemics of dropsy, especially among those who worked in ditches, or in the phosphate mines, or in the rice fields. Some of these were called malaria, some Bright's disease, some simply dropsy; but Beriberi was not diagnosed. The suggestion was made at the meeting of the Medical Society in Charleston, in April, 1905, while a group of cases similar to those reported by Dr. Jervey was under discussion, that these might be cases of Beriberi, but the suggestion was not followed up, and so to Dr. Jervey and his consultants belongs the first glory for making the diagnosis.

When Dr. Jervey had his suspicions aroused, he called in Dr. Dawson, of Charleston, and others in consultation, and a final diagnosis was made, and on this diagnosis the cases were sent to the penitentiary, in Columbia, in order to remove the cases from the source of the trouble. While at Columbia, the diagnosis of Dr. Jervey and his consultants was concurred in by Doctors Butler, Long, and others, and Dr. Butler's admirable account was made possible.

The mortality in these cases agrees with that observed by the Japanese, who find that about five per cent. of all cases die and about twenty-five to thirty per cent. of the severe cases die.

The peculiar point about these cases is that they are all of the wet or dropsical form, while in other epidemics in other countries the dropsical form is not the most common as a rule. But the point brought out in the discussion that one type usually predominates in a given epidemic would lead us to suspect some difference in the causative agent of different epidemics.

It has been so long claimed that these and other tropical diseases did not exist in the United States, that most of us have gotten into the deplorable habit of ignoring the possibility of meeting them in our daily work, and have let golden chances of distinguishing ourselves go by. This blind acceptance of the dicta of "The Authorities" that these diseases were non-existant with us, has been our undoing more than once, and should make us chary hereafter of accepting without reservation any "Authority" who is making statements about us from afar off. Not so long ago these self same men either ignored, or else dismissed with a word, the subjects of hookworm infection, pellagra and other equally important diseases, but now pour out a stream of papers on them. If we continue to rely entirely on "The Authorities" we will continue to overlook obvious facts.

As to the etiology of the disease: When we search the authorities, we again find a large amount of paper and space consumed, but few adequate facts, and Dr. Jervey, in his paper, has wisely refused to draw any definite conclusion, but

has given us definite facts for our digestion. His paper should arouse a marked degree of interest throughout the sea-coast and gulf-coast regions of our Southern States, and should be of value in giving all observers certain definite facts to start their investigations with. So far, in spite of an immense amount of work done in other countries, and of an immense amount of practical knowledge as to how to avoid and how to handle these cases, little has been accomplished in solving the paramount question of causation. Nor has the subject absorbed the amount of attention it deserves in this country, either by students or by writers; the very paucity of literature on the subject would lead one to believe that its importance was negligible.

A few years ago the writer had occasion to look up the subject by reason of an epidemic which came under his observation. At the time he could obtain very little information from either government publications, text books, or medical journals. Since that time a few articles have appeared from time to time in medical journals, but even yet there is not the proper interest displayed. We must realize that we have with us to-day many tropical diseases formerly ignored but indigenous to our soil, and many others imported by the restless ebb and flow of travel. No longer do we have to go to strange lands to see strange diseases; others do that for us and oft times bring them home to us. In order to avoid overlooking these, we must be alert and keep ourselves posted in every way. We cannot remain provincial no matter how much we might desire to do so, but must join the great march and become cosmopolitan is spite of ourselves. If we refuse to go out to the great world it will insist on coming into our doors and forcing itself on our attention. We have had no valid excuse these many years for overlooking the presence of Beriberi and other kindred diseases in our midst, for the statement the "We were told it wasn't here and didn't think to look," will not pass muster as valid.

Tropical Diseases and a School of Tropical Medicine.

And this brings us to where we were finally aiming—the necessity—no longer the luxury of a school of tropical medicine in our medical schools.

Last year, at the Inter-National Pellagra Conference, in Columbia, it was decided to establish an association for the study of this and other tropical diseases, but so far the study has been limited to pellagra and hookworm, two most important subjects, but not so paramount as to entirely eclipse all others. We have in this country numerous diseases recognized and probably still more numerous unrecognized as being of the so-called tropical nature. For instance, in addition to those already mentioned, amebic dysentery is with us as well as bacillary dysentery. Malaria is always with us and yellow fever and dengue are not unknown. Sprue has been seen as well as ainhum. Filariasis is a fairly common condition, and while so far as we know, trypanosomiasis has not yet been recognized in man in this country, yet it exists among certain animals to a marked extent. And so it goes with a tale which might be increased indefinitely. If the presence of these is not warranty enough for the establishment of some special branch of study, where could we seek for further inducement? Viewed from either an economic or a scientific viewpoint, the importance of such study is obvious to the merest tyro.

And now the great American question: What use can we make of these facts? What are we to do about it? The answer is: Get busy. No longer accept blindly the statements made by others from the depths of a colossal ignorance, but set out and discern the facts for our-

selves. Do not discredit the work done by others, but do not accept the dictum of a man in New York, or Boston, or London, or Paris, or Berlin about what is present or absent in New Orleans, or Jacksonville, or Waccamaw Swamp, unless he has spent as many years in that region as you yourself have spent, and in as diligent study as you should have made of existing circumstances. Cease relying on props furnished by others and learn to walk and see for yourself and tell others what you have seen. Do not fear ridicule, because others are not so observant as you may be, but work always towards the light and so you will attain knowledge. Keep your mind always open to the possibility and indeed the probability of strange things happening to you, and some day you may wake to find yourself a famous authority instead of an humble hanger-on in the dust.

Now a child who has to learn to walk by itself loses much valuable time doing so; time that may be saved by proper training from those who have already learned. In like manner, those of us who have not yet made a study of tropical diseases may learn much from those who have done so, and thus the establishment of a course of instruction in these diseases would be of incalculable benefit to the profession in the Southern States especially.

We offer as a suggestion to those interested in medical education that they waste no further time in establishing such a course in their schools; and to those who have never had the advantage of such a course, that they hasten to fit themselves to practice their chosen profession by learning as much of this subject as possible. It is written that, "To him that hath shall be given, and from him that hath not shall be taken away even the little that he hath," and with no one thing is this statement more true than with knowledge. It is incumbent on us not only through our duty to our patients, but also to ourselves that we fit us to give the best obtainable, in knowledge and in practice.

A CORRECTION.

The editor wishes to call attention to the fact that the article headed, "An Important Utero-Ovarian Tonic and Sedative," etc., appearing among the current literature excerpts in the April issue of the Journal was so placed by mistake, and should have appeared after all of these.

[*S. 6049, Sixty-first Congress, Second Session.*]

"In the Senate of the United States. February 1, 1910. Mr. Owen introduced the following bill, which was read twice and referred to the Committee on Public Health and National Quarantine:

A bill establishing a department of public health, and for other purposes.

Be it enacted, etc., That there is hereby established a department of public health under the supervision of the secretary of public health, who shall be appointed by the President a Cabinet officer, by and with the consent of the Senate, at a salary of $12,000 per annum, with like tenure of office of other Cabinet officers.

SEC. 2. That all departments and bureaus belonging to any department, excepting the Department of War and the Department of the Navy, affecting the medical, surgical, biological, or sanitary service, or any questions relative thereto, shall be combined in one department, to be known as the department of public health, particularly including therein the Bureau of Public Health and Marine-Hospital Service, the medical officers of the Revenue-Cutter Service, the medical referee, the assistant medical referee, the surgeons and examiners of the Penson Office; all physicians and medical officers in the service of the Indian Bureau, or the Department of the Interior at old soldiers' homes, at the Government Hos-

pital for the Insane, and the Freedman's Hospital and other hospitals of the United States; the Bureau of Entomology, the Bureau of Chemistry and of Animal Industry of the Department of Agriculture; the hospitals of the Immigration Bureau of the Department of Commerce and Labor; the emergency relief in the Government Printing Office, and every other agency of the United States for the protection of the health of the people of the United States, or of animal life, be, and are hereby, transferred to the department of public health, which shall hereafter exercise exclusive jurisdiction and supervision thereof.

Sec. 3. That the official records, papers, furniture, fixtures, and all matters, all property of any kind or description pertaining to the business of any such bureau, office, department, or branch of the public service, is hereby transferred to the department of public health.

Sec. 4. That the secretary of public health shall have supervision over the department of public health, and shall be assisted by an assistant secretary of public health, to be appointed by the President, by and with the advice and consent of the Senate, at a salary of $6,000 a year, with such duties as shall be prescribed by the secretary not inconsistent with law.

Sec. 5. That the secretary of public health shall be authorized to appoint such subordinates as may be found necessary. There shall be a chief clerk appointed, at a salary not to exceed $3,000 a year, and such other clerks as may from time to time be authorized by Congress.

Sec. 6. That the officers and employees of the public service transferred to the department of public health shall, subject to further action by Congress, receive the salaries and allowances now provided by law.

Sec. 7. That it shall be the duty and province of such department of public health to supervise all matters within the control of the Federal Government relating to the public health and to diseases of animal life.

Sec. 8. That it shall gather data concerning such matters; impose and enforce quarantine regulations; establish chemical, biological, and other standards necessary to the efficient administration of said department; and give due publicity to the same.

Sec. 9 That the secretary of public health shall establish a bureau of biology, a bureau of chemistry, a bureau of veterinary service, a bureau of sanitary engineering, reporting such proposed organizations to Congress for suitable legislation relative thereto.

Sec. 10. That all unexpended appropriations and appropriations made for the ensuing year shall be available on and after July 1, 1910, for the department of public health where such appropriations have been made to be used by any branch of the public service transferred by this act to the department of public health. It shall be the duty of the secretary of public health to provide, on proper requisition, any medical, sanitary, or other service needed of his department required in another department of the Government.

Sec. 11. That any other department requiring medical, surgical, sanitary, or other similar service shall apply to the secretary of public health therefor whereever it is practicable.

Sec. 12. That all officers or employees of the Government transferred by this act to the department of public health will continue to discharge their present duties under the present organization until July 1, 1910, and after that time until otherwise directed by the secretary of public health or under the operation of law.

Sec. 13. That all laws or parts of laws in conflict with this act are hereby repealed."

The Owen Bill.

The above is the text of Senate bill 6049, Sixty-first Congress, second ses-

sion, known as the Owen Bill. We recommend its careful consideration by all members of the profession, and request that they use their influence to obtain its passage. Letters written to your senators and congressmen at times have good effects, and we suggest that you write immediately to request their support in this bill. For many years it has been a source of wonder that so much attention should be paid to the health of plants and animals and so much money spent on their preservation, and so much dignity given to the departments for their conservation, and yet our greatest asset—our health—is so neglected and relegated to the control of an insignificant bureau. Senator Owen points out, in his masterly exposition of the subject, both the farce and the folly of the present arrangement and offers many cogent reasons for the establishment of a department of public health.

For many years people have been so afraid of any limiting of their personal liberty, any interference with their freedom of action, that they have opposed any chance of federal interference in their manner of living, no matter whether it was for their ultimate good or not. As a nation we should now have passed the hobbledehoy age and have reached the period in our life where we, as a people, have attained that dignity which allows us to relegate some of our personal and selfish rights to a central government for the sake of helping both others and ourselves. We need no longer be standing guard over our dignity with a shot gun for fear someone might inadvertently step on it—that is a characteristic of either a very young, a very small, or a very undeveloped individual—but should be so big now that no one will want to step on us. We can easily afford to transfer certain of our rights to the government and receive in exchange therefor, protection which we urgently need. No better illustration of the necessity for such a department need be cited than the illustration of the spread of the Bubonic plague on the Pacific coast, as brought out by the Senator from Oklahoma.

The Journal adds its voice to the many calling for the establishment of such a department, and in so doing only reiterates what was voiced by the House of Delegates at Laurens. It is the voice of the people that now calls—and *Vox populi, Vox Dei.* Let the Triumvirs hear.

ROBERT KOCH.

With the death of Robert Koch, there passes from us one to whom the world is deeply in debt. A student, a scholar, an investigator, and explorer, a scientist; he has revolutionized both medicine and surgery by his discoveries and leaves a better monument than any carved in stone in the thousands—yes, millions—of people to-day benefitted by his discoveries. No word of ours could add to the meed of his praise, and we leave it to abler pens than ours to tell of his achievements. It is no false claim to make that a Koch, a Lister, or a Jenner, is a greater man than either Alexander or Napoleon, for they have brought happiness and health where the others have brought death and destruction—and often disease. One a blessing, the other a curse to the human race.

DEPARTMENT OF COUNTY SECRETARIES.

MARY R. BAKER, M. D., Sec. and Treas.

In response to a call from Dr. F. M. Dwight, Councillor for the Seventh District, the following physicians met in Sumter, S. C., March 9, 1910, for the purpose of organizing the Seventh District Medical Society. Drs. S. C. Baker, J. A. Mood, E. A. Wilson, J. C. Lemon, Walter Cheyne, H. M. Stuckey, Archie China, F. K. Holman and W. E. Mills, of Sumter; Drs. Jas. H. McIntosh, A. B. Knowlton, and Mary R. Baker, of Columbia; Drs. F. M. Dwight and L. M. Parler, of Wedgefield; Drs. J. LaBruce Ward and W. P. Moorer, of Georgetown; Dr. C. B. Geiger, of Manning, and Dr. C. E. Gamble, of Turbeville.

Dr. Dwight called the meeting to order and requested Dr. Mary R. Baker to act as secretary.

Dr. Dwight stated the object of the proposed organization, viz: to bring the doctors in the Seventh District in closer touch with each other; to help the busy rural doctors; to aid the county societies and the State association.

Drs. S. C. Baker and A. B. Knowlton spoke in behalf of such organization, and Dr. Baker moved that the meeting be organized and that the chairman appoint a committee of three to draft a constitution and by-laws. Seconded and carried.

The following committee was appointed: Drs. Knowlton, S. C. Baker, and Geiger.

The meeting was suspended until the committee was ready to report.

Dr. Knowlton read the proposed constitution upon motion by Dr. S. C. Baker, Each section of the constitution was read, discussed and adopted separately.

The following is the Constitution, as finally adopted:

I.

The name of this Association shall be the Seventh District Medical Society.

II.

The object shall be to bring into closer relations the several county societies comprised within the Seventh Councillor District, and to advance the cause of medical science within its borders.

III.

Members shall be the members of the respective societies in this district, who shall enroll their names with the secretary.

IV.

The officers shall be a President, Vice-President and Secretary-Treasurer, who shall hold office for one year. Election shall be by ballot.

Two meetings shall be held each year at such time and place as shall be fixed by the president, with the advice of the vice-president and secretary.

VI.

A committee on program shall consist of the above named officers.

VII.

No paper shall exceed twenty minutes unless by consent of the society. All discussions shall be limited to five minutes, and no member shall speak more than once upon a given subject.

VIII.

Necessary funds shall be raised by assessment.

Upon motion by Dr. McIntosh, the constitution as a whole was adopted.

Dr. China moved that the officers be elected by informal ballot; the member receiving the highest vote be declared elected. Seconded and carried.

The following officers were elected:

President—Dr. James H. McIntosh, Columbia.

Vice-President—Dr. C. B. Geiger, Manning.

Secretary-Treasurer — Dr. Mary R. Baker, Columbia.

Dr. Dwight said that he had made every effort to secure papers for this meeting, but had failed.

Dr. China reported a case of Puerpural Fever, which was freely discussed; many others reported cases and methods of treatment.

Dr. Holman reported a case of adherent placenta, in which there was no lochia and no secretion of milk.

Dr. Knowlton reported a case of Intestinal Obstruction following labor; the obstruction was behind the stomach and was supposed to be due to gastric ulcer.

Dr. S. C. Baker reported a case of cancer of the stomach.

Dr. Cheyne reported two cases of heart disease complicated by congested livers.

Upon motion by Dr. Moorer, the secretary was instructed to write to the secretaries of the county societies of this district and request them to urge their members to join this society.

The society then adjourned to the Sumter Hotel where the visitors royally dined as the guests of the Sumter doctors.

Mary R. Baker, Secretary.

SOCIETY REPORTS.

Anderson, no report.
Aiken, no report.
Bamberg, no report.
Barnwell, no society.
Beaufort, no report.
Charleston, no report.
Cherokee, no report.
Chester.
Colleton, no report.
Clarendon, no report.
Darlington, no report.
Edgefield, no report.
Fairfield, no report.
Florence, no report.
Georgetown, no report.
Greenville, no report.
Greenwood.
Hampton, no report.
Horry, no report.
Kershaw, no report.
Laurens, no report.
Lee, no report.
Lexington, no report.
Marion, no report.
Marlboro, no report.
Newberry, no report.
Oconee, no report.
Orangeburg, no report.
Pickens, no report.
Columbia, Richland.
Saluda, no report.
Spartanburg.
Sumter, no report.
Union, no report.
Williamsburg, no report.
York, no report.

REPORTS FROM COUNTY SOCIETIES.

The regular monthly meeting of the Columbia Medical Society was held May 9, 1910, in the City Hall.

The following members were present: Drs. W. C. Abel, D. S. Black, W. A. Boyd, M. R. Baker, S. B. Fishburne, R. W. Gibbes, LeGrand Guerry, S. E. Harmon, C. L. Kibler, A. B. Knowlton, R. A. Lancaster, J. H. McIntosh, L. B. Owens, H. W. Rice. Visitors; Drs. R. G. Blackburn, E. Cooper, and Symes.

Dr. Fishburne reported a case of periostitis following a blow.

Dr. Boyd made the delegates' report.

The secretary was instructed to send a copy of our programme to the secretary of each county society each month.

It was moved and carried that the society invite some leading lawyer, dentist, pharmacist, etc., to address the society from time to time.

Dr. Knowlton demonstrated two new instruments that he had invented, one a lacing for abdominal drainage cases, the other an intestinal gas trocar. He also reported a case of Exophthalmic Goitre.

Mary R. Baker, Secretary.

Spartanburg, S. C., June 4, 1910.

The regular monthly meeting of the Spartanburg County Medical Society was held on May 27, 1910, with only six members in attendance. None of the three essayists were present. With this meeting came the end of the three months' trial of the A. M. A. programme of post-graduate study, and as it had proved to be a complete failure with this society, it was decided to return to the old method of appointing members to read papers on subjects chosen by themselves. The committee appointed to confer with the Superintendent and Trustees of the City Graded Schools regarding the medical inspection of children, reported that the School Board was very much in favor of having this work done and pleased with the offer made them by the society.

L. Rosa H. Gantt, Secretary.

Chester, S. C.,

The regular meeting of the Chester County Medical Society was held on Monday, June 6th. While the attendance was rather small, there were many evidences of life and lively interest in the affairs of the society.

As Dr. Young was unable to complete his paper, most of the meeting was taken up with two clinical cases. Dr. McConnell presented a case of severe teuosynovitis involving the wrist joint and tendon sheaths about the joint. Dr. Johnston presented a case of phlyctenular conjunctivitis and also gave an interesting report of a traumatic injury of eye, received in a railroad accident.

The roll of the society now has upon it the name of every regular practicing physician in the county, except one. The out-of-town members are put to some inconvenience in attending meetings, but usually take more interest and attend more regularly during the summer months.

Dr. W. W. Love, who has practiced very successfully at McConnellville, in York County, for a number of years, has located in Chester. His membership is now with us, and we are glad to see that he takes an active interest in his society. Dr. T. B. Kell, of Fort Lawn, has also transferred his membership from York County. We hope to have him come up and meet with us often.

We are glad to know that Dr. H. B. Malone, who has been associated with Dr. Pryor for a year, will remain in Chester permanently. In the future he will assist Dr. Pryor in his practice and hospital work.

Best wishes for the new editor and wishing him the hearty co-operation of the County Secretaries.

W. R. Wallace, Secretary.

Resolved: First, That the Greenwood County Medical Society, recognizing the great need of a better educated profession, desire to express its approval of the very able and timely "Presidential Address" delivered by Dr. John L. Dawson, at the last meeting of The South Carolina Medical Association, in Laurens;

Resolved: Second, That a copy of these resolutions be sent to Dr. John L. Dawson and to the State Journal.

Dr. H. N. Sloan, President.
Dr. G. R. Neel, Sec'y pro-tem.

PERSONAL NEWS.

Drs. A. R. Fike, L. Rosa H. Gantt and J. H. Allen have been appointed Medical Inspectors of the Spartanburg Graded Schools.

Hospital for Gaffney.

Company is Organized and all the Stock Taken.

(News and Courier, June 10, 1910.)

Gaffney, June 9.—Special: A new enterprise, which means much for Gaffney, is "The City Hospital." A meeting of citizens was called Wednesday night,

which was organized by the election of Ed. H. DeCamp, Chairman, and within a few minutes after subscriptions were called for the full amount of stock was more than subscribed, and a committee, consisting of Col. A. N. Wood, Mr. J. A. Carroll, Drs. R. T. Ferguson, B. R. Brown, J. N. Nesbitt and S. B. Sherard, were appointed to secure a charter, and report to a meeting of the corporators.

This meeting was held on Tuesday night, and this afternoon at a meeting of the Board, Dr. R. T. Ferguson was elected Secretary, and all necessary papers were sent to the Secretary of State. One most encouraging feature of the enterprise is that every physician in Gaffney is in favor of building the hospital, and all are doing their utmost to further the enterprise. The capital stock will be $20,000, divided into shares of $100 each. As soon as a charter is obtained a site will be purchased and work will be commenced on the building.

From the Lancet-Clinic.

At a special term of Court of Charleston, S. C., the case against W. J. Sawyer, formerly of Charleston, for the illegal practice of medicine, was taken up. This case was preferred and pressed by the Horry County Medical Society, through its secretary, Dr. H. H. Burroughs. When the case was called Mr. Sawyer entered a plea of guilty, and was given a sentence of $50 or thirty days in jail, with the addition of a fine of $300 or six months in jail without further trial, provided a true bill against him for the same offense was ever hereafter found by any grand jury of this county. Dr. Burroughs announces that this is just the beginning of a series of suits to rid the county, if possible, of such practices.

CURRENT LITERATURE.

Medical Record, New York.

Newer Conceptions of Myocardial Disease.—To the classification of myocardial disease presented several years ago, Satterthwaite adds another form—atrophy of the heart, which is, however, very rare. His classification is as follows: (1) Acute parenchymatous myocarditis; (2) acute diffuse myocarditis, including the tuberculous, syphilitic and suppurative forms; (3) chronic myocarditis; (4) the fat heart; (5) the fatty heart; (6) hypertrophies, and (7) atrophies. Neither dilation nor spasm is included in the table. Satterthwaite says that they are incidents which occur at times in any of the varieties mentioned, and cannot, therefore, be considered separately. He discusses the pathology and diagnosis of the various forms and their treatment.

Albany Medical Annals.
May.

Hemolysis in Diagnosis of Carcinoma.—Of a total of 1,812 observations reported by ten different workers, 472 cases were carcinoma, and of these 317, or 67 per cent., gave positive hemolytic reactions; 79 were benign tumors, of which 1, or 1.25 per cent., were positive; 507 observations were made in a variety of diseases, 74, or 15 per cent., of which presented positive reaction; 509 observations were made on normal individuals; 14, or 2.6 per cent., were positive. In 40 postoperative carcinoma cases without clinical recurrence, the reaction was uniformly negative. One hundred and eighty-eight tests were performed on tuberculous patients; of these, 82, or 44 per cent., presented Crile's "reverse" hemolysis. Krida has made 76 tests. In 12 cases of carcinoma,

the reaction was positive in 9, or 75 per cent. In 4 cases of carcinoma without clinical recurrence the reaction was uniformly negative. In 23 cases of a variety of diseases, 1, or 4 per cent, (chronic ulcers,) presented a positive reaction. Of 25 clinically well patients, 2, or 8 per cent., responded positively to the reaction. In a certain small number of cases not clinically carcinomatous, a positive reaction was obtained. There were in all 5 such cases, in all of which Krida applied a second test 2 to 3 days after the first. The second test was positive in 3 of the cases; one of these was a case of chronic ulcers; 2 individuals were normal. In the remaining 2 patients, clinically well, the test proved negative. The hemolytic reaction occurs in so great a percentage of carcinoma cases and in so small a percentage of normal individuals and patients with other diseases, which conditions can usually be differentiated, as to make it of material diagnostic assistance in doubtful cases, especially in doubtful cases of carcinoma of the gastro-intestinal tract. Especially as it is so simple of application, Krida holds that it should be performed in all suspected carinoma cases. The *"in vivo"* or "skin" reaction, because of its better scientific basis, and because it is technically less difficult and time-consuming. Krida regards as the clinical method of choice.

Helminthiasis in Children.—Twelve of 30 children who suffered from unexplained nervous or gastrointestinal symptoms were found by Schloss to harbor intestinal worms. Consecutive examinations of 280 children showed that 80 (28.57 per cent.) harbored intestinal worms; 5 of the children harbored 2 species of parasite, giving a total of 85 infections. Thirty-one (11.07 per cent.) of the children harbored *Trichiuris trichiuria,* 23 (8.21 per cent. harbored *Oxyuris vermicularis,* 20 (7.14 per cent.) harbored *Hymenolepsis nana,* 6 (12.14 per cent.) were infected with *Ascaris lumbricoides,* and 5 (1.78 per cent.) with *Tœnia saginata.* Only 1 of 33 children infected with *Trichiuris trichiuria* (from both groups of examinations) suffered from symptoms. Thirty-five of the 51 children infected with the other parasites (from the consecutive examinations) suffered from symptoms. The eosinophil blood cells were not increased in cases infected with *Trichiuris trichiuria.*

Spirochæta Pallida in Umbilical Cord of the New-Born Infant.—Emmons studied the cords in 30 cases suggestive of syphilis. When the child was born alive, the portion of the cord immediately adjoining the ligature was studied, and in stillbirth cases the portion between the ligature and the abdomen. Whenever possible, autopsy was done, and in each case the routine microscopic examination of the placenta gave a clue as to the probable diagnosis. The tissue was imbedded in paraffin and the sections stained by the method of Levaditi. Whenever the livers from the corresponding children were obtainable, they were imbedded at the same time, so that sections could be compared with those of the cord. When positive results were obtained, the liver sections showed the abundant presence of a well-stained spirochete, and in such cases numerous sections of cord were studied and a negative report registered only after a most prolonged and careful search.

From this study, Emmons draws the following conclusions:

1. Spriochæta pallida is rarely found in the cords of the syphilitic new-born infants. When positive results are obtained, they are present in considerable abundance in the muscularis of the umbilical vein in sections taken from the neighborhood of the umbilicus.

2. A large proportion of syphilitic new-born infants, as shown by microscopic examination of the placenta, as well as by characteristic autopsy findings with spirochetes demonstrable in the liver, show that spirochetes could not be found in the cord even after extensive search. Accordingly a negative diagnosis cannot be made by this procedure alone.

3. Occasionally the search for spirochetes in the cord may be of positive value as a clinical

test. But the much greater frequency of negative findings hardly justifies its adoption as a routine procedure.

Vaccines in Pneumonia.—Stewart holds that the pathologic condition resulting from an acute pneumococcic infection can be relieved, removed or modified, by injecting subcutaneously killed bacteria of the species causing the diseased condition.

Sexual Forms of Malarial Plasmodia.—From what is said by Craig regarding the action of quinine on the malarial gametes it is evident that if we thoroughly treat our malarial patients during the initial attack of the disease we shall prevent the formation of these bodies, and, therefore, the transmission of the infection to the mosquito. A great deal of the malaria prevalent in every malarial locality is directly traceable to improperly treated patients, and the prophylaxis of the disease will be immensely helped by the thorough treatment of every infection. The practice of regarding such infections as cured because the active symptoms have disappeared is a most common and a most pernicious one, and one that is responsible for the transmission of a very large proportion of malarial disease. Every malarial patient, he asserts, should be kept on quinine for at least a week or two after the disappearance of symptoms, and should take the drug, in 10-grain doses, once a week for two months after the acute attack.

Bacterial Vaccines.—The 50 cases reported by Fisher occurred in the services of the physicians of the Connecticut Hospital for the Insane and the adjoining city. Fisher prepared vaccines for all of them. They included 18 different conditions and 7 different types of bacteria. Of the 50 patients 34 recovered much more rapidly than would be expected under usual treatment. One left the hospital after one injection; two died; both the latter were practically moribund when treatment was begun. The cases included one of appendiceal abscess; a suppurating sinus of the leg; two cases of metritis, endometritis and pyosalpinx; one case each of hay fever; bronchial asthma; abscess of the gall-bladder; pyelonephritis; infection of the hand; six cases of pneumonia; three cases of coryza; four cases of acne.

Pregnancy and Labor of One of the Siamese Twins.—There live in Prague twin sisters, known as the "Siamese Twins," who are united to each other by a solid bridge of tissue, with some cartilage and bone enclosed, in the region of the hip-joint and the brim of the iliac bone. Several attempts at separation have been suggested, but refused by the twins because they desired to exhibit themselves for money. One of the twins suffered a few years ago from cholelithiasis, and had to be operated on in the surgical clinic of Prague, where examination revealed that apart from the malformation of the connecting iliac bone, the two persons have separate and independent bodies and independent bodily functions. A few days ago the twins, now 36 years of age, again came to the clinic, as the former patient again suffered from colicky pains. The surgeon made a diagnosis of advanced pregnancy, or rather incipient labor. Although that possibility was absolutely denied by the girls, the patient soon gave birth to a healthy boy, and later, after repeated questioning, confessed. The other sister felt nothing at all of the pain of the mother so closely united to her, and when the next day the temperature of the mother went up two degrees the temperature of the other twin remained normal, showing the absolute separation of the two organisms as regards function and metabolism.

Wassermann and Noguchi Fixation Tests.—It is claimed by Fox that a positive Wassermann reaction is frequently obtained in cases of leprosy giving no history or symptoms whatever of syphilis. The reaction is at times very strong,

inhibition of hemolysis being complete. It occurs chiefly in the tuberculous and mixed forms of the disease, especially in advanced and active cases. In the cases of the maculoanesthetic and purely trophic type the reaction is generally negative.

NEWER METHODS OF DEMONSTRATING THE TREPONEMA PALLIDUM WITH ESPECIAL REFERENCE TO THE INDIA-INK METHOD.

By Fraser B. Gurd, B. A., M. D., in the Journal of the A. M. A., May 23, 1910.

Hech and Wilenko in July, 1909, published the observation that the "Treponema Pallidum along with other micro-organisms, rendered itself easy of identification by this method. The technique of the method is simplicity itself. The serum obtained is placed on a slide and an equal quantity of ink added. The ordinary commercial India inks may be used, Gunther's being particularly good, although the results with Higgins' waterproof ink are good enough. The serum and the ink are then rapidly and thoroughly mixed and smeared over the slide so that a pale brown color results. The material dries in a minute or slightly more and is immediately ready for examination on placing the oil for immersion directly on the ink smear. It is particularly important in using this method that in so far as possible serum alone be used and that a minimum amount of mucous material or fibrin be mixed with the ink. The presence of mucous results in its taking up a large amount of the color material of the ink, with the result that a smear of the requisite color and thickness cannot be made. If too much serum is used the albuminous material appears to precipitate the stain from the fluid and a finely granular appearance is seen microscopically, which is practically worthless for diagnostic purposes. Again, if too much ink is used the surface of the smear is increased in size to such an extent that the task of examining it thoroughly is greatly lengthened. Regarding the reliability of this method perhaps it is not yet possible to speak definitely.

Among the articles in the Journal of the A. M. A. for May 28, 1910, is a "Summary of a Ten Years' Campaign Against Hook-Worm Disease in Porto Rico," by Bailey K. Ashford, M. D., Major Medical Corps, U. S. Army, and Pedro Gutierrez Igaravidez, M. D., Director of the Service of Tropical and Transmissable Diseases of Porto Rico. This article treats of the deaths under Spanish and American rule, causes of mortality and the beginning of scientific investigations and systematic work against the hookworm.

On November 24, 1899, Dr. B. K. Ashford found the extremely prevalent and fatal anemia of the island of Porto Rico to be due to hookworm disease. Not being a zoologist, Dr. Ashford contented himself with giving a full description of the diseases, his blood findings and an exposition of the dangers of the worm to the States from an economic standpoint, leaving to Dr. Chas. Wardell Stiles, the recognized American authority on animal parasites, the purely zoologic description of the nematode. Dr. Stiles in 1902 demonstrated for the first time that the hookworm disease was crippling the South just as Dr. Ashford had shown it to be the industrial curse of Porto Rico. In January, 1902, Dr. Ashford began with Dr. Walter W. King, of the U. S. Public Health and Marine Hospital Service, a complete study of this disease and an earnest appeal was made to combat the disease that was the scourge of fully 90 per cent of the agricultural laboring classes in Porto Rico, and a bill carrying an appropriation of $5,000.00 for the study and treatment of anemia in Porto Rico was passed through the Legislature, February, 1904. This marks the first era in the work against hookworm in Porto Rico and was the

first demonstration of its endemic presence on American soil.

At the Rockefeller Institute for Medical Research, New York City, Drs. Simon Flexner and Paul A. Lewis are making a series of experimental investigations of "Poliomyelitis." Their seventh note on "Experimental Poliomyelitis in Monkeys" is published in the Journal of the A. M. A., May 23, 1910. "The virus which we are employing in our experiments was derived from Case K, in its twenty-fifth generation in monkeys and has attained a high degree of activity. Intracerebral inoculation of even minimum quantities of a filtrate (0.02 to 0.01 c. c.) prepared from the spinal cord of a recently paralyzed animal causes almost invariably the development of paralysis within six to eight days. Recovery almost never takes place. This virus may, therefore, be regarded as of maximum potency. With this virus we have endeavored to produce active immunity in monkeys and, in certain instances, successfully. Experiments are in progress to determine whether the paralysis, after intracerebral inoculation, can be prevented by immune human serum and what the limits of the control of the experimental disease by such sera are. In considering these results and particularly their significance for human pathology, account should be taken of the fact that experimental poliomyelitis in monkeys is far more severe and fatal disease than epidemic polomyelitis in human beings.



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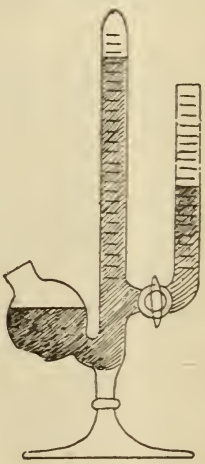
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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. **J. C. SOSNOWSKI, Editor.**

VOL. X. 6 JULY, 1910. No. 7

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

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THE SERUM TREATMENT OF EPIDEMIC CEREBROSPINAL MENINGITIS.*

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The most important recent achievement in serum therapy is its successful application to epidemic cerebrospinal meningitis. The use of an immune serum in this dread disease has already produced results which promise to place this disease in the same category as diphtheria. It is these results which are chiefly of interest to the clinician, and to present these results, to summarize the practical progress attained, is my chief purpose in this paper. The preliminary work, such as the establishment of theoretical considerations and their testing by laboratory experiment, is not the main interest of the practitioner. Yet a brief tracing of the various steps by which progress has been made is of some interest, and affords a means of procuring a better measure of the value of the achievement.

The Work of Flexner at the Rockefeller Institute for Medical Research.

In the winter of 1904 and the spring of 1905, an epidemic of cerebrospinal meningitis prevailed in New York City, which

*Read before the South Carolina Medical Association at Laurens, S. C., April, 1910.

included about 4,000 cases, with a mortality of 85 per cent. In the spring of 1905 the New York Health Department appointed a commission to co-operate with the department in investigating the epidemic. On this commission was Dr. Simon Flexner, whose particular task was the study of the pathogenic properties of the diplococcus intracellularis and the immunization of animals with a view to obtaining immune sera which might be used for the differentiation of the diplococcus.

The results of Flexner's work at the Rockefeller Institute for Medical Research were reported in March, 1907. In a paper on "Contributions to the Biology of the Diplococcus Intracellularis," Flexner brought out many interesting facts of importance in understanding the subsequent development of serum therapy. Among other things, attention was called to the brief vitality of the diplococcus in cultures, which is not due to exhaustion of the medium, nor to accumulation of products, except, perhaps, in large quantities. The organism was shown to be particularly susceptible to injurious influences, as cold, or suspension in salt solution. It tends to disintegrate rapidly, the autolysis being due to an intracellular enzyme which is liberated on the death of the cell, and which is not specific, but causes disintegration in other organisms. Various strains of diplococci showed wide variation in virulence, and virulence cannot be restored by animal passage. The autolysates were found to be toxic for guinea-pigs, but the toxic body is distinct from the enzyme, and is liberated by the disintegration of the cell. There is no extracellular toxin.

In a second paper, on "Experimental Cerebrospinal Meningitis in Monkeys," Flexner describes the condition produced in these animals by injection into the spinal canal of cultures of the diplococcus intracellularis obtained from typical cases of meningitis. This condition was an acute inflammation of the meninges, which very closely resembled that seen in the disease in man. The monkey appeared to be much less susceptible than man, as enormous quantities were required, compared to the probable number concerned in producing the disease in man. Flexner considered actual multiplication of the organisms to be small in monkeys, while in man it is probably very great.

This discovery of the ability to produce in monkeys a disease closely resembling epidemic cerebrospinal meningitis as found in man, was of great importance in erperimental work in producing a curative immune serum, as it gave a good basis for measuring the protecting power of the serum.

Preliminary Review of the Problem.

In his third paper, "Concerning a Serum Therapy for Experimental Infection With Diplococcus Intracellularis," Flexner describes his method of attacking the problem of producing an effective immune serum. The disease was obviously of such a character that in an anti-serum lay the only hope of therapeutic achievement. This hope did not appear to be very great, because the pathological effects in this disease are due to endotoxic constituents of the diplococcus intracellularis. Previous work had shown that endotoxins had usually failed to yield active antisera of value, although opinion was somewhat divided on this point. The main question to be determined, on the answer to which the result would depend, was whether the quantity of antibody which could be produced would suffice to neutralize enough of the poison to influence the result of infection. Judging from the results of neutralization experiments with immune sera produced from other endotoxins, there did not appear much hope that this condition would be fulfilled.

On the other hand there were other considerations which increased the hope of a favorable result from the use of an immune serum. It was very possible that

restraint of growth and multiplication at some periods in the course of the infection might be more important than the neutralization of free endotoxin. Some of the facts brought out by Flexner in his studies of the biology of the diplococcus intra-cellularis were strong in support of this possibility, chiefly the fact of the great susceptibility of the organisms to unfavorable influences. Many agents can probably affect the powers of multiplication in the body, as normal serum, or even more, sterile inflammatory exudates. An antiserum, therefore, even if containing relatively small amounts of antibodies, as indicated by neutralization experiments, may be effective beyond this calculated value by restraining multiplication, or reducing the number of organisms, and by supporting the body's power of resistance.

The theoretical outlook was less discouraging from another fact, namely, that the lesions of the disease are limited to a localization where they can be brought directly under the influence of the curative agent, by direct injections into the spinal canal. This was a very great advantage, and its recognition led Flexner to waste no time experimenting with subcutaneous injections.

It appeared from these preliminary theoretical considerations that there was a considerable prospect of success in combating infection with the diplococcus intracellaris by means of immune serum.

Preparation of the Serum and Its Use in Experimental Infections.

Immune serum was at first prepared from rabbits, goats and monkeys, immunized by the injection of various strains of diplococci, and with exudates from the peritoneal cavity of guinea-pigs. Rabbits proved poor animals for the work, as they developed hyper-sensibility to the diplococci, from which many died. Also rabbit serum proved quite poisonous for small guinea-pigs, when injected together with cocci into the peritoneal cavity. Nevertheless, rabbit serum appeared to have undoubted protective power. Goat serum could be used with good results in guinea-pigs, but it failed to exert any beneficial effect in experimental meningitis in the one monkey in which it was tried, and the lesions at autopsy showed that goat serum could not be injected with impunity into the spinal canal of monkeys. The most successful results were obtained with antiserum obtained from large monkeys, and clearly showed that this serum had a marked protective power when injected into the spinal canal of smaller monkeys which had been experimentally infected. In a series of five monkeys three were successfully treated by intraspinal injection of antiserum, given at the time of injection of the cocci, and two hours and five hours, respectively after the injection. One monkey, to which the serum was given three hours after the injection of the cocci, died in nineteen hours. One monkey, to which 5 cc was given two and one-half hours after the injection of the cocci, remained well. The control monkeys receiving no antiserum all died within twenty-four hours.

Anti-meningitis Serum in Man: Method of Preparation.

Monkey serum could never be obtained in sufficient quantities for use in man, and after these experiments, Flexner began to immunize a horse. At first the inoculations consisted of subcutaneous injections of cultures of the diplococcus intracellularis, heated to 60° C. for 30 minutes. Many different strains were used in preparing this vaccine. The doses were gradually increased, and when a certain dose was reached, intravenous inoculation was substituted. Later, subcutaneous and intravenous injections of an autolysate were used. Finally, intravenous injections were discontinued, and alternate subcutaneous injections of living and

dead cultures were used at seven-day intervals, many different strains of the diplococcus intracellularis being employed.

It requires in a horse about eight months to produce a serum containing the maximum amount of antibody. After this stage is reached, the horse is "yielding," and is bled at intervals to obtain the antiserum. It is kept at the proper stage as regards the amount of antibody by continuing the alternate subcutaneous injections of living and dead cultures.

When the first horse began to yield, the antiserum was first used in man, in an epidemic in Ohio.

The Technic for the Use of Anti-meningitis Serum.

Flexner recommended from the start that the anti-serum should be given by subdural injection only. The theoretical considerations outlined above pointed to this as the most promising method of using the serum, as the principal hope for its success lay in the fact that the anatomical lesions of the disease were of such a nature as to permit the bringing of the serum in as concentrated a form as possible into direct contact with the foci of infection and inflammation. As will be seen, experience has given evidence of the correctness of this recommendation.

The technic employed in giving the anti-meningitis serum is the following: Lumbar puncture is performed, and as much cerebrospinal fluid as will run freely is allowed to escape, after which a syringe filled with the desired quantity of antiserum is connected with the needle, through which the fluid has escaped, and the serum is injected through this same needle.

First Reports of the Results of the Use of Anti-meningitis Serum.

The first report on the results of the use of the anti-serum was published by Flexner and Jobling at the beginning of 1908. The first opportunity to test the anti-serum occurred in an epidemic in Akron, Ohio, which included 22 cases. In 12 of these cases three died, a mortality of 25 per cent, while in the 10 cases untreated by serum the mortality was 90 per cent. Other figures from the Ohio epidemic showed very similar results.

Not only were these results of a very promising character as regards the effects of the anti-serum upon the mortality of the disease, but the clinical observations of its apparent effect upon the symptoms, course, termination, liability to relapse and upon the diplococci found in the cerebrospinal fluid were of such a character as to justify a strong presumption in favor of the great value of the anti-serum in epidemic cerebrospinal meningitis. The presumption was strong enough to indicate that the serum should be widely employed, and it was clearly proved that the injection of horse serum into the inflamed spinal canal was a procedure unattended by any especial risk.

The Recent Analysis of 400 Cases—Mortality.

In a recent report, Flexner and Jobling present final and convincing evidence of the value of serum therapy in epidemic cerebrospinal meningitis. The authors show that the mortality reached by the disease during the height of epidemics in the United States and Great Britain has been about the same; this is 75 per cent. The mortality of the sporadic form of the disease, so far as it has prevailed in the United States, has not been considerably below that figure, and it has sometimes been higher. From various reports it appears that the mortality in general of cerebrospinal meningitis due to the meningococcus, varies from 68 per cent to 91 per cent. In considering the mortality of 421 cases Flexner and Jobling eliminated 43 cases, including cases with secondary and mixed infections of the meninges, cases with intercurrent infection, hope-

lessly chronic cases of several months' standing, moribund when treated, and cases which died within 24 hours of the time of receiving the first dose of serum, which were moribund, or so rapidly fulminant that there was no time for the treatment to take effect. Of 393 cases, 295, or 75 per cent, recovered, and 98 died, a mortality of 25 per cent.

The results are also analyzed according to age. The disease is commonly regarded as being universally fatal in infants under one year. Yet in 22 cases under one year of age, 11 recovered, and most of the fatal cases were first treated late in the course of the disease, and six more presented well marked symptoms of hydrocephalus.

Conclusions From the Analysis.

The conclusions drawn by Flexner and Jobling are as follows: "It is our belief that the analysis of histories of cases of epidemic meningitis which have been presented in this article furnish convincing proof that the anti-meningitis serum when used by the subdural method of injection, in suitable doses and at proper intervals, is capable of reducing the period of illness; of preventing, in large measure, the chronic lesions and types of the infection; of bringing about complete restoration of health in all but a very small number of the recovered, thus lessening the serious, deforming and permanent consequences of meningitis, and of greatly diminishing the fatalities due to the disease."

The Method of Distribution of the Flexner Serum.

The ability of Flexner to present at this time such convincing evidence of the value of the serum treatment of epidemic cerebrospinal meningitis is largely due to the method he has followed in distributing the serum. A general and uncontrolled distribution of the serum would have gravely affected the value of his collected statistics, as it might have fallen into the hands of incompetent observers who might be unwilling or unable to carry out properly the bacteriologic examinations which are requisite to prove the cases actually infected with the diplococcus intracellularis, or who might use it improperly, or fail to make satisfactory records of their observations. Consequently, Flexner wisely preferred to keep the distribution of the serum in his own hands. This is the present condition of its distribution. The serum is at present not on the market, but is made only at the Rockefeller Institute for Medical Research, from which place it may be obtained free. Not enough can be made as yet to supply all the cases of meningitis in the United States and Great Britain. It is therefore given out to those whose hospital connections are such as to afford them constantly sufficient clinical material for its use, and who can satisfy Dr. Flexner as to their ability to make lumbar punctures and use it properly, to supply him with proper records of their clinical observations and make the requisite bacteriologic examinations. Others who meet with cases of the disease can obtain aid by applying to whomsoever in their respective localities is charged with the distribution of the serum.

The Proper Method of Using the Serum.

The technic of injecting the serum into the spinal canal has been described above. As to the size of the dose, the frequency of repetition of the serum, the use of the serum has been, and to a great extent still is, experimental. As experience with the serum has increased there has gradually been formed a conception of a best method of using it, which, though probably only provisional, represents present views on this question. In this connection the writer will quote from a paper on this subject which appeared in the Boston

Medical and Surgical Journal, December 3, 1908:

1. "Perform lumbar puncture; be prepared to give the serum as soon as meningitis is suspected. If the fluid is cloudy, give the FIRST full dose of serum at once without waiting for the bacterial examination, although further doses are only to be given in case the diplococcus intracellularis is found in the cerebrospinal fluid. The serum is of no value in other forms of meningitis.

2. "At every dose give as much as possible. Give 30 c. c. in all cases in which the amount of fluid withdrawn is 30 c. c or less, unless a distinctly abnormal sense of resistance is encountered after as much has been injected as has been withdrawn. In all cases in which the amount of fluid withdrawn is more than 30 c. c., give as much serum as the quantity withdrawn. In very severe or fulminating cases, in which the amount withdrawn is between 30 c. c. and 45 c. c., give 45 c. c. unless abnormal resistance is encountered.

3. "In very severe or fulminating cases, repeat within 24 hours as soon as the patient begins to get worse again, or at 12-hour intervals.

4 "In average cases repeat daily until four full doses have been given in all cases.

5 "If diplococci persist after four full doses have been given, continue the injections until they have disappeared.

6. "If subjective symptoms, any impairment of the mental condition, or fever persists after diplococci have disappeared, or after four full doses have been given, without progressive improvement, wait four days, if the condition of the patient is stationary. At the end of four days, or at any time if the patient's condition is getting worse, repeat the treatment with four daily full doses and continue as if this were the original attack.

7. "When a relapse occurs, either by reappearance of diplococci in the cerebrospinal fluid, or by a reappearance of symptoms, give four daily full doses and continue treatment as if this were the original attack.

8. "Treatment along these lines should be continued until the patient is symptom-free, without diplococci in the fluid or until the chronic stage is established.

9. "In the chronic stage watch for possible reappearance of diplococci by doing occasional lumbar punctures. If diplococci reappear, resume treatment with the serum as outlined above. In chronic cases with excessive cerebrospinal fluid under marked pressure, try daily lumbar puncture without the injection of serum."

Theory of the Mode of Action of the Serum.

The whole action of the serum is not clear. It does not depend mainly on the neutralization of toxin, although there is some specific antitoxin with neutralizing power. The amount of antibodies is small. The serum is bactericidal rather than antitoxic in its nature, and its chief action is exerted upon the diplococci themselves. It appears to injure them in such a way as to cause their rapid death and disintegration and to limit their multiplication. At the same time phagocytosis is greatly increased, and within the phagocytes the toxin is broken up and rendered harmless. This rapid intracellular digestion of the injured and disintegrating organisms prevents injury from excessive liberation of toxin. Concentration is a necessary factor in its good effects.

Personal Experience With the Serum.

My records of cases treated with the anti-meningitis serum includes 86 cases of epidemic cerebrospinal meningitis in which the diagnosis was confirmed by the finding of the specific organism in the cerebrospinal fluid. My cases include all types of the disease, and this should be

taken into consideration when considering the mortality figures, as there were cases in the series of the fulminating type in which death occurred within an hour of the first dose of serum, and cases which had already advanced so far into the chronic stage of the disease when the serum was first used that there was but little hope of a favorable result. Of these 86 cases there were 62 recoveries and 24 deaths, this representing a percentage of recovery of 72 per cent and a mortality of 28 per cent. In only three cases were there any permanent sequelae so that the percentage of complete recovery was 68½.

The fatal cases are of especial interest. Of the 24 fatal cases, 8 were first seen in the late chronic stage of the disease at a period when the temperature had fallen to normal, the patient simply remaining in an unconscious condition of prolonged and indefinite duration. These cases are unfavorable for the use of the serum, although two such cases whch had remained in this condition for many weeks completely recovered immediately after the serum was used. Three of the 24 fatal cases were already moribund when the serum was first used, dying within two hours afterward. One of the fatal cases reacted promptly to the serum, and all meningeal symptoms had disappeared when the patient died of an intercurrent bronchopneumonia. In only 12 cases in my series did the serum appear to fail, that is, did a fatal result occur in spite of the serum being used fairly early in the course of the disease. The percentage of failure, therefore, in my series is only 14 per cent. The mortality exclusive of those cases which were moribund when first seen was 25 per cent.

The disease may for convenience be divided into the following types:

1. The well-known type, in which the progress of the disease was so rapid that the patients when seen were already in an extremely serious condition, with profound coma and weak heart.

2. Severe cases, in which the patients were unconscious or in violent delirium with poor general condition.

3. The common type, in which the patients were not unconscious, but very apathetic or in mild delirium, with fairly good general condition when seen.

4. The mild type, in which the patients were perfectly rational, with headache, rigidity or retraction and good general condition.

5. The chronic type, in which the patients were seen late in the course of the disease, unconscious, but without fever or active symptoms:

In the present series these types were distributed as follows:

Type.	Cases.	Deaths.
1. Fulminating	8	3
2. Severe	24	8
3. Common	39	5
4. Mild	5	0
5. Late chronic	10	8

I have not been able, for purposes of comparison, to collect enough cases treated in Boston and vicinity without the antiserum. It is possible, however, to compare the mortality at the Children's Hospital under the use of the antiserum with the mortality in other years under other methods of treatment, as sufficient cases have been treated in this hospital each year to afford a basis for such a comparison. While the number of cases treated each year varies, the average yearly number for the last ten years is twenty. This comparison also throws light on the comparative value of the treatment with the antiserum and of other methods.

Up to 1903 the treatment was largely symptomatic. In 1903, 1904 and 1905 lumbar puncture was largely employed as a therapeutic measure. Whenever the withdrawal of the cerebrospinal fluid appeared to be followed by improvement in the patient's condition, it was repeated at short intervals, particularly at those times when the condition showed any tendency to grow worse. It was concluded at that time that repeated lumbar puncture is of

some slight value as a therapeutic measure. In 1906 the cases were treated by the frequent or daily administration subcutaneously of diphtheria antitoxin.

In 1907 a vaccine prepared from the B. intracellularis was used in connection with the estimation of the opsonic index. Each year is regarded as beginning November 1 of the preceding calendar year, because we began to use the antiserum in November, 1907. I could not find any notable variation in the type of the disease from year to year.

It appears that the lowest mortality of any year before 1908 was 58 per cent, and that it varied between 58 per cent. and 80 per cent., but that in 1908, under the use of the Flexner antiserum, the mortality has shown a remarkable drop to only 19 per cent., and in 1909, with fewer cases, was 24 per cent. We may conclude that the other methods of treatment, vaccines, diphtheria anti-toxin, and repeated lumbar puncture, are of little value in comparison with the antiserum.

Effects of the Serum.

The three principal effects of the use of the serum seem to be: First, to produce a fall of temperature; second, to produce a rapid improvement in the patient's general condition, accompanied by a more or less marked relief of certain symptoms; and, third, to cut short the course of the disease.

The most striking effect on the temperature is a permanent critical fall following the first dose of serum. This occurred in many cases, the temperature falling at once to normal, or nearly normal, and showing no further tendency to rise. Other cases showed a similar critical fall of temperature, which was, however, not permanent, the temperature rising again and finally coming down by lysis. Another effect was seen in a rapid permanent lysis, which was very striking in cases in which there had been a consistent high temperature up to the time when the first dose of serum was given. A similar lysis, but not permanent, the temperature going up again, occurs at times, at other times there is a temporary sharp fall of temperature, not to the normal and not permanent. In these the temperature rose again, to come down by lysis later in the course of the disease. There is at times no immediate effect on the temperature.

The Effect on Symptoms.

The effect on the symptoms and general condition is the most striking phenomenon observed with the use of the serum. In some cases there occurred a permanent return to consciousness, a disappearance of mental dullness, a disappearance of delirium and a disappearance of headache, hyperesthesia, tenderness of the neck or vomiting. These symptoms were often relieved completely within twenty-four hours after the first injection, the patient changing in the most remarkable way from a serious condition of coma to a favorable condition of normal mental activity.

At other times the improvement in this set of symptoms occurred more slowly, and at still other times particularly in the late chronic cases, no such effect was noted. The rigidity of the neck and König's sign were usually much more persistent, so that at times patients remained for some time normal in every way, even playing with the other children of the ward while these signs still persisted.

As to the cutting short of the disease, the average length of time which patients remained under treatment was but a small fraction of the time which patients who recovered remained under treatment at the hospital in previous years.

Its Effect on the Cerebrospinal Fluid.

Another notable effect of the serum is seen in the successive examinations of the

cerebrospinal fluid during the period of its use. This effect is most striking in early cases, in which the cerebrospinal fluid contains large numbers of diplococci. In such a case a great many extracellular diplococci are observed in the fluid withdrawn by the first lumbar puncture. Twenty-four hours after the first injection the fluid presents a strikingly different picture. The whole number of organisms seen is much smaller, but the chief change is that the majority are intracellular, only rare extracellular forms being seen. The third lumbar puncture shows still fewer diplococci, and those only intracellular. In the fourth fluid, after three doses, there are frequently no diplococci to be found, or, at most, very rare intracellular forms.

Relapses sometimes occur under the use of the serum. In a relapse, after a period of improvement, the symptoms begin to recur and the temperature to rise. In two of my cases the serum was given in small single doses and was not repeated daily, although symptoms were not completely relieved, the treatment being repeated only in single doses when the relapses became plainly manifest. Each relapse responded to one dose of serum, but I believe the course of the disease would have been shortened if the treatment had been pushed at the outset, or if several successive doses had been given at the first relapse. In one case the treatment at the outset was interrupted by inability to obtain cerebrospinal fluid. Later, when the relapse occurred, it yielded promptly and permanently to three successive daily injections. In other cases the relapse occurred in spite of proper treatment at the outset. In two of these, treatment of the relapse by single doses of serum gave only temporary improvement, but both cases yielded permanently when four successive full doses were given.

The Lack of Sequelae.

The completeness of recovery is another noteworthy point in this series. There were sequalae in three cases only; one child being deaf, and one blind and deaf, and one left with a paresis of the lower extremities. The results of the use of the serum appeared to depend chiefly on how early it was first used. The earlier it was employed the more marked were its effects. In most cases in which the serum was used very early the disease was suddenly aborted after one dose of serum—that is, there was an immediate fall of temperature to normal and all symptoms were at once completely and permanently relieved. In other cases there is very rapid and permanent improvement with a short convalescence. In still others improvement is less rapid. There appears to be a very direct relation between the amount of improvement and the stage of the disease in which the serum is first given.

Conclusion.

I conclude from this series of cases that:

1. The use of the Flexner antiserum is of great value in epidemic cerebrospinal meningitis. I believe its value to be comparable to that of diphtheria antitoxin in diphtheria.

2. The use of the serum at times aborts the disease, frequently rapidly relieves its symptoms, shortens its course, lessens the liability to sequelae and greatly reduces its mortality.

3. The serum should be used as early as possible in all cases, even of suspected meningitis.

4. It should be frequently repeated as long as there are symptoms or any tendency to relapse.

5. Late chronic cases are unfavorable for the use of the serum, but any case in which the diplococci are present has some hope of relief by its use.

6. Some cases are resistant.

EARLY SYMPTOMS AND EARLY DIAGNOSIS OF UTERINE CARCINOMA.*

Clyde F. Ross, M. D., Anderson, S. C.

The mere fact that 75 per cent. of the women suffering from uterine carcinoma are turned away from our hospitals inoperable is a sufficient reason, I think, for my presenting this subject for your consideration. Who is to be held accountable for this condition of affairs rests about equally upon the laity and the medical profession. The laity are responsible because they are ignorant of the early signs of uterine carcinoma, and the profession is guilty partially on account of ignorance, but more often on account of carelessness or neglect. How many of us having a patient come to us with some menstrual irregularity or the appearance of leucorrhoea, will prescribe some uterine tonic and send her home hoping that she will be cured without further investigation instead of making then and there a thorough vaginal examination.

Although we realize that 90 per cent. of cancers of the uterus occur between forty and fifty years of age, yet I cannot too strongly impress upon you the fact that they do occur earlier. Some of us have an idea that cancers don't occur in women under thirty-five years of age, when in reality epithelioma of the cervix is almost as frequent between thirty-one and thirty-five years as it is between forty-five and fifty years; and it has not been longer than one month ago since I saw with one of the physicians here an inoperable carcinoma of the uterus in a woman thirty-five years old, it having been present to all appearances two or three years; and only a few days ago I saw an operable one in a woman thirty-two years old.

Again I want to caution you as to the fallacy of heredity. Many a physician has attributed irregularities to the menopause because he could get no history of cancer, while in fact there is very seldom any hereditary history.

Carcinoma of the uterus occurs almost exclusively in multiparae, the traumatisms of labor being the most important predisposing cause, and contrary to the general belief occur in about equal numbers in the black and white.

Cancer of the cervix is much more common than cancer of the body, occurs earlier in life, grows faster, involves the surrounding structures earlier, its operative mortality is higher, and the percentage of cures less. In the future I will speak almost entirely of cancer of the cervix. There are two varieties of cancer of the cervix: (1) Squamose cell, epithelioma; (2) Adeno-carcinoma. The squamose cell is the most frequent variety, comprising about one-third of all primary cancers. It finds its origin in the squamose epithelium covering the vaginal portion of the cervix. At first the cervix is hypertrophied, hard and nodular, the mucous membrane being pale, later papillary groups spring up from the mucosa, are very friable and bleed easily. These may assume cauliflower masses which later break down, leaving an irregular ulcer.

The other variety or adeno-carcinoma starts in the cylindrical cells lining the cervical canal; and, depending upon its position in the canal, is it early or late being recognized. It develops slowly and the nodules formed do not break down until late. As a rule cancer of the cervix in the early stages extends only by infiltration and very seldom by metastasis.

As to the symptoms of uterine cancer there is not one pathognomonic sign to make the diagnosis for us. Those symptoms or signs which should lead us to

*Read before the Anderson County Medical Society, November 2, 1909.

make an examination in every woman over twenty years of age are (1) any deviation from the normal in the amount or prolongation of the menstrual periods; (2) any slight "show" or severe hemorrhage upon exertion, straining at stools, or coitus; (3) any leucorrhoeal discharge in a woman who has never had any; (4) any increase in the amount or change in the character of the leucorrhoeal discharge in a woman who has had it for years; an acrid blood tinged condition is very suggestive.

Nothing has been said of pain as an early symptom because it is not. Pain is induced only by an extension of the diseased condition to the body of the uterus or beyond, and the cancer has usually reached the inoperable stage. Nor have I mentioned the malodorous discharges which are caused by disintegration of the carcinomatous tissues very late in the disease.

These early signs should lead us to suspect malignancy in every woman between the ages of twenty and seventy, but more particularly should it apply to the cancerous age (40-50) when we so frequently ascribe every abnormal deviation to the menopause and help our patients on to the cancerous grave.

Cancer is primarily a local disease, and in its primary stage every particle can be removed, so it is our duty to teach the laity the early signs of carcinoma, have them realize the importance of these deviations so that they will present themselves for treatment; then it is moreover our duty to examine these patients immediately and thoroughly and not send them away with a prescription, but examine them, for these growths become inoperable in from one to six months. After examination if the diagnosis is positive, give them the proper surgical treatment at once, and if the diagnosis is negative your patient is happy in the belief that she has it not.

In 78 per cent. of these, symptoms have been present three months, and in about 57 per cent. they have been present six months, showing that a diagnosis can be made during the operable stage and yet in about 95 per cent. the disease is not detected early enough to get good results. Operative procedure is instituted in only about 25 per cent., and in approximately 5 per cent. is it instituted early enough to circumvent the disease.

These statistics prove to us beyond a doubt the necessity of our conquering more thoroughly the early diagnosis of the cancer of the uterus.

To make a diagnosis we have the early symptomatology which indicates the necessity of an immediate examination. The gross pathology is so characteristic that if one has ever seen one case or read the description of the pathological process a diagnosis can be easily made. Either an enlarged, hard, nodular cervix or a mass of granulations greets your inspection, or worse still, the disease has progressed to the formation of a malignant ulcer, and here let me warn you against making a diagnosis of "ulcer of the womb" unless it is malignant, for at least 90 per cent. of uterine ulcers are malignant. In all cases where there is the slightest suspicion of carcinoma a microscopical examination of either a section or some of the curette findings is absolutely necessary to confirm or reject your diagnosis. This is especially so in cancer of the body.

As to treatment, no doubt our best results are to come from prophylaxis and anticipation. The prophylactic treatment consists in a careful examination of every woman two or three months after confinement to ascertain the amount of damage done and to repair same if necessary. If it is not necessary at the time and she has a cervical tear she should be examined every six or eight months in anticipation of some pathological condition setting up. The anticipation of these growths has been thoroughly discussed before, so I will not dwell further on this phase of the subject, although it is the most important one.

The radical operation of Wertheim, in which was advocated the removal not only of the uterus and its appendages, but also a thorough dissection of the iliac and sacral glands, is not being so universally accepted at the present writing, but instead it is claimed that when these glands are involved, the disease has progressed so far as to make a radical operation impossible, in which case only a simple hysterectomy is done so as to eradicate the disease locally. If the cancer has not extended to the glands a radical local operation, which consists in removing uterus, appendages, thorough dissection of broad ligaments and ligating the uterine artery as near its origin as possible, offers the greatest hopes for a cure.

In concluding I want to again reiterate the necessity of a vaginal examination in all women above twenty years of age, and especially those about the menopause who suffer with any irregularities of their menses, any intermenstrual bleeding or leucorrhoea, and if the diagnosis of malignancy is positive the immediate institution of the proper surgical treatment.

HOOKWORM IN THE NEGRO.*

By Dr. W. J. Burdell, Lugoff, S. C.

It is known that the hookworm was brought into the South with the negro when he was brought from Africa, and that while the negro seldom shows any symptoms of uncinariasis, he does play the part of host to hookworms very often. You will readily see that if the negro has hookworms, he plays the roll of carrier, and it is for the purpose of showing to how great an extent this race is serving in this capacity, that I have prepared this paper.

During the past year I have made examinations of the stools from a series of negroes looking especially for hookworm ova, and the results have been astonishing to me, especially as until after I had made over two hundred of these examinations, I had not seen nor heard any figures stated as to the prevalence of these parasites in the colored race.

Total number of stools examined, 226, from 226 different individuals.

Found hookworm ova in 145, 65 per cent.

Stools were taken from individuals ranging from 2 to 60 years of age.

Stools from 178 who were under 20 years of age.

Of these 178 stools, 126 contained hookworm ova, 70 per cent.

Three men over 50 years of age showed hookworm ova. These men had moved from the clay land of Fairfield County into the sand land less than twelve years prior to examination.

Two hundred of the individuals presented no symptoms of any disease.

Five were tubercular, and all of these had hookworms.

Twenty-one were "rickety" children under five years of age, and all of these had hookworms.

Of the 226 individuals I got a history of ground itch in 190 cases, 48 per cent. All went barefooted in the summer time.

There were 92 girls under 20 years, and of these 61 had worms, 66 per cent.

There were 86 boys, and of these 65 had hookworms, 75 per cent.

Eight men and 11 women over 20 years of age had hookworms.

The series embraced 38 families, of whom 30 were native to the sand hill region of Kershaw County. One individual was from Georgia, two individuals from

*Read before the South Carolina Medical Association at Laurens, S. C., April, 1910.

Richland County and five from the clay land regions of Kershaw County.

All of the individuals examined were from a gingercake to black color, as I have found that the mulatto is very often infected and often presents typical cases of uncinariasis. When we consider the fact that of 200 healthy negroes taken at random throughout a section of country that is less than three miles square, 65 per cent. are daily throwing out of their bodies numbers of ova, and as no one can conceive of the number of these ova until he has made an examination of a stool that contains them, we can readily understand why we have so many cases of uncinariasis throughout the South, and we wonder why it is that there are not many more cases than there are.

Think of the average negro in the country districts of the State, with his free and easy manner of disposing of his faeces and add this source of infection to that of the cases of uncinariasis that we have among the whites and mixed blooded; and surely we can see that it is time to take notice, and we will also see the need for a few more Rockfeller donations.

Five of my cases were tubercular. Stiles says that the death rate from tuberculosis among "hooky" whites is much higher than it is among those not "hooky." I was treating these five tubercular negroes as nearly according to the recognized modern method of treating this disease as possible with this class of patients, and as usual, was getting very poor results. I found the ova and treated for the hookworms, getting large numbers in each case, and after removing the worms I have noticed in three cases a much more rapid improvement that I was getting before giving the thymol. I do not claim that you will cure tubercular negroes by giving thymol, but I do believe that one of the factors that causes the mortality from tuberculosis to be so high and its course so rapid in the negro, is the fact that he has uncinariasis in what we may call a latent form, and the tubercular infection, or perhaps any other infection, may overcome the partial immunity the race has acquired for hookworms and we have a double infection.

Twenty-one of my "hooky" cases were "rickety" children under five years of age. Surely all of you have seen rickety negro children. Large heads, large abdomens, spindly, bowed legs. There is no use to attempt a description for I am sure that the picture is very familiar. Now, understand me, I do not attribute this condition to hookworms alone. Unsanitary management and unsuitable food are the principal causes of this condition, of course, but my experience has shown me that if you will clear out the host of worms, the ascarides and the hookworms, these rickety children will improve much more rapidly than they will otherwise.

Conclusion.

1. In the sand hill country districts of this State about 65 per cent. of all the negroes have hookworms and are perhaps the most common source of this disease in the State.

2. That the hookworm is one of the principal causes of the high mortality from tuberculosis in the negro race.

3. That uncinariasis is latent in a majority of the negro race, and that in the presence of other infections, the uncinariasis becomes active and lessens the natural resistance.

4. That uncinariasis plays an important role in the causation of rickets in the very young negro child.

5. That it is the duty of us physicians to do our utmost to improve the sanitary conditions throughout the country districts as well as in the towns of the State, and especially in regard to soil pollution.

Permit me to add in conclusion that it will do no harm, and may give you a key to the problem, if in any obstinate case of any disease you will make, or have made, a microscopic examination of the stools,

for repeated examinations by many observers have shown that hookworms are no respecters of persons and are found very often in cases where there has been no suspicion. Dr. Stiles, as you doubtless remember, diagnosed a number of cases among the delegates to the Hookworm Conference in Atlanta, and there was no little consternation, I have been told, when this statement was made. The diagnosis is easy and the treatment is simple, and thymol is a specific.

INCREASE OF BLINDNESS.*

WHAT HAS BEEN DONE FOR THE PREVENTION OF THE INCREASE OF BLINDNESS, AND WHAT CAN BE DONE?

By Dr. Charles W. Kollock, Charleston, S. C.

1. Many States have passed stringent laws, in some they are enforced, in others —and there are too many—they are dead letters.

2. Several States have published a great deal of interesting and instructive literature on the subject, which has been placed in the hands not only of physicians and health authorities, but of the laymen, including those who under ordinary circumstances would be least likely to know of the danger or to see the literature. This literature shows not only the number of persons blind from preventable and curable diseases, but also the expense of supporting and maintaining them at home and in institutions. It describes in plain terms the source of the disease, how it may be prevented, the symptoms of its beginning and what should be done if the eyes become infected. Finally it contains pictures that should move hearts of stone and cause tears of anguish to flow, because so much misery and sorrow exist that might have been prevented by trifling expense and a few moments of careful observation and treatment. In New York State the New York Association for the Blind has been founded and is doing excellent work. New York State gave $5,000 last year for the prevention of blindness, and Massachusetts and Ohio have established commissions for the blind.

What has South Carolina done for the prevention of the increase of blindness? She has within her confines a race of people for whose presence she is not responsible. At one time she was responsible for their welfare and their health was jealously guarded. These people who, during their days of bondage, knew little of disease and hardship, eventually were freed and told to look for themselves. They were infants as far as the experiences of life were concerned, and it was not strange that before many years had passed they had become infected by every loathsome disease, had drunk to the bottom the bitter dregs of the cup of life and had transmitted these weaknesses to their children and to their children's children. It is useless to say that we are no longer responsible for these people and that they must shift for themselves. They are here and we cannot yet solve the problem of ridding ourselves of them. Shall we permit them to live in ignorance of the laws of health, to become festering sores in our midst, which will not only spread among themselves but will involve our own safety and increase the expenses of living which are soaring higher and higher every day? No, though we may make wry faces and hold our noses, though we care nothing for them we must

*Read before the South Carolina Medical Association at Laurens, S. C., April, 1910.

protect ourselves, which is one of the first laws of nature. This State has then a duty to perform which she can not shirk, she must act, and the sooner she acts with firmness and justice the better it will be for her own welfare and for her position among the sister States. Diseases of the eyes are rife among them, and blindness has increased to a frightful extent since they were freed. They are not only absolutely ignorant about the danger of their eyes becoming infected but employ the most useless and, at times, the most disgusting remedies when they are affected. The "grannie woman" is the supreme authority at all labor cases, and what she says goes. She is usually intensely ignorant, extremely conceited and nothing can convince her that mother's milk is not a sovereign remedy for all affections of the eyes. During my service at Shirras' Dispensary are constantly seen many cases of all kinds of eye troubles that have been allowed to run on without treatment for weeks and even months. The only excuse is that they thought it was only a cold or would soon get well itself, and that such and such a remedy had been advised by some old woman or purchased through some newspaper advertisement.

In 1896 the Legislature passed the following law:

No. 107.

AN ACT relating to the Care of Infants with Diseases of the Eye.

Section 1. Be it enacted by the General Assembly of the State of South Carolina, That should one or both eyes of an infant become reddened or inflamed at any time after birth, it shall be the duty of the midwife or nurse or person having charge of said infant to report the condition of the eyes at once to the local Board of Health of the city or town in which the parents of the infant reside.

Section 2. That the Secretary of State shall cause a sufficient number of copies of this Act to be printed, and supply the same to Health Officers and Health Committees, whose duty it shall be to furnish a copy to each person who is known to act as midwife or nurse in the cities and towns for which they have been appointed.

Section 3. Any failure to comply with the provisions of this Act shall be punishable by a fine not to exceed twenty-five dollars or imprisonment not to exceed one month, or both.

Section 4. This Act shall not apply to towns or cities of less than one thousand inhabitants.

Approved the 25th day of February, A. D. 1896.

Let us pause a few moments and consider this law. The first section requires no criticism, but when we note later that it only applies to cities and towns of 1,000 inhabitants and over, this question comes to our minds: Why is it confined to cities and towns of 1,000 inhabitants and over, and why are smaller towns and the country districts deprived of the benefit of this Act? Are such diseases seen only in cities and towns of 1,000 inhabitants and over?

It is just here, gentlemen, that I can enlighten you. At the instigation of the American Opthalmological Society I brought this subject of preventable blindness before this Association and told what was being done in other States. A committee, with myself as chairman, was appointed by the Association to go before the next meeting of the Legislature and to urge the passage of a law similar to those that had been adopted by several other States. A law like that of New York State was drafted and introduced. My committee was summoned to appear before the medical committees of the Senate and House to explain the need of the bill. A physician, who was a member of one of these committees, said to me: "Doctor, that law may be necessary in Charleston and other cities but we never have any such troubles in the country." Comment upon this statement before such a body as this is unnecessary. I finally

convinced them of the good of such a law and they agreed to report it favorably to both Houses. It was introduced in the House by the Hon. T. W. Bacot, of Charleston, where it was ridiculed and contemptuously spoken of as "Bacot's sore-eyed babies bill."

The bill was finally passed after a struggle of two years on the part of Mr. Bacot, but it was so emasculated as to render it of little effect. If those who are responsible for the spread of this disease could be emasculated to a similar extent there would be no need of the law. One section of the statute says that the Secretary of State shall have copies of the law printed and shall distribute them to health officers and health committees throughout the State. Has any Secretary of State ever obeyed this law during the years that it has been on the books? No. Now, gentlemen, it is the solemn duty of this Association not only to see that the provisions of this law shall be carried out, but that at the next meeting of the Legislature it shall be so amended as to apply to every portion of the State and shall be rigidly enforced.

The latter will be no easy matter, but the rule of ignorance and indifference should end in our State. The reign of the negro midwife and her equally ignorant white colleague should cease, for 'tis a crying shame that children are brought into the world only to be sacrificed on the altar of ignorance. The layman who subscribes to such ignorance may be pitied, but the physician should be regarded with horror and contempt, his license should be revoked and he should be run out of the community. The midwife nuisance is, perhaps, one of the blots that we cannot yet rid ourselves of, but we can teach them to be clean, we can make them report serious cases to the proper authorities and we can reduce the percentage of blindness far below its present status. Do you know to what extent blindness exists in the various institutions for the blind and what it costs to support a blind person? Let me quote from reliable sources:

Of the more than 64,000 blind persons in the United States, it is estimated that between 6,000 and 7,000 are totally blind because a simple precaution was not taken at the time of their birth.

The following table shows the number of new pupils admitted into ten of the principal schools of this country during the year 1907, and the proportion of those admitted who had lost their sight from opthalmia of the new-born:

1907.

Schools for the Blind.	New Admissions	Ophthalmia of New-Born.	Per Cent.
N. Y. State School for the Blind, Batavia, N. Y.	13	4	30.7
Penn. Institute for the Blind. Overbrook, Pa.	27	9	33.33
Perkins Institute and Mass. School for the Blind. Boston, Mass.	43	13	30.00
Colorado School for the Blind, Colorado Springs, Col.	7	3	42.80
Western Penn. Institute for the Blind, Pittsburgh, Pa.	28	8	28.57
Missouri School for the Blind, St. Louis, Mo.	19	6	31.57
Conn. State Board of Education for the Blind, Hartford	8	1	12.50
Ohio State School, Columbus	61	6	9.83
Maryland School for the Blind, Baltimore, Md.	13	4	30.77
Ontario Institute for the Blind, Brantford, Ont.	23	5	21.74

The average of new admissions in these ten schools for the blind shows that 25.21 per cent. were victims of ophthalmia of the new-born.

One quarter of the new pupils admitted during 1907 were therefore *needlessly blind.*

The following table shows the admissions for eight years, 1900-1907, to one school, the Pennsylvania Institute for the Blind, at Overbrook, Pa., and the percentage of pupils admitted each year who had lost their sight from ophthalmia neonatorum:

PENNSYLVANIA SCHOOL FOR THE BLIND.

Year.		Per Cent.
1900	11 out of 25	= 44
1901	10 out of 26	= 38
1902	9 out of 39	= 23
1903	14 out of 50	= 28
1904	15 out of 56	= 26
1905	21 out of 42	= 50
1906	12 out of 38	= 31
1907	9 out of 27	= 33 1-3

Average for eight years 33 1-3 per cent. needlessly blind.*

In our own institution for the blind, at Cedar Springs, there are seventy-eight blind persons, twenty-three of whom (or more than 33 per cent.) have been blind from birth.

"Let me also quote from reports which show what percentage of births are reported by midwives in several cities. In Chicago, 1904, we find 86 per cent. of all births, principally among Italians, reported by midwives. In Buffalo, N. Y., with a population of about 400,000, nearly one-half the births, in one year, were attended by midwives. In New York City, in 1905, 43,834 births, or 42 per cent. of the whole number, were attended by midwives, employed largely by Italians, Austro-Hungarians, Polish Jews and other immigrants. For the year 1907, in New York City, there were 68,186 births reported by physicians, and 52,536 reported by midwives. In September, 1908, the registered midwives in the five boroughs of New York City numbered 1,382."

In Charleston for the six months beginning July 1st and ending December 31st, 1909, there were white births, 213, of which 58 were attended by midwives and 155 by physicians. Of colored births there were 325, 295 of which were attended by midwives and 30 by physicians.

The number of midwives in this State is probably in about the same ratio as in others. Our only hope lies in teaching them the importance of being clean, and this will be a huge and never-ending task. We must individually set ourselves to work to teach how disease may be conquered, the reform should begin in our homes, from whence it will spread like the forest fires and burn as long as there is fuel. The law requires that all contagious and infectious diseases shall be reported to the local boards of health, but are we ready to report that such a house or family has a case of gonorrhoeal ophthalmia or that such a woman or man has gonorrhoea or syphilis? I think not, but there can be no doubt but that the publicity of such cases would lessen the number. Mr. President and gentlemen, lectures upon this subject should be given to the public as well as those upon tuberculosis, unsuspecting and innocent women should be taught the danger of infection from such diseases as syphilis and gonorrhoea, and every man who contemplates marrying should before securing a marriage certificate be required to show a clean bill of health.

GASTRIC AND DUODENAL ULCERS IN CONTRADISTINCTION TO THEIR SEQUAELAE.*

Dr. A. B. Knowlton, Columbia, S. C.

One of the most practical facts in connection with the study of digestive disturbances is the clinical separation of gastric and duodenal ulcers from their sequelae.

By this, I mean the general recognition that there are two distinct stages in the life history of all uncured gastric and duodenal ulcers; the first representing the ulcer in its original state unhampered by complications or sequelae; the second representing, not the ulcer, but its organic consequences and sequelae, such as calloused ulcer or strictured pylorus.

This separation of these ulcers from their sequelae has resulted in a new and practical classification which divides all digestive ulcers broadly into two heads, the clinical or medical ulcer, on the one hand, and the calloused or surgical ulcer upon the other. The need for this classification arose out of the *actual clinical history* of the disorder, rather than from anything fanciful or chimerical.

The term "clinical" or "medical ulcer" is intended to signify that form which is *still* in its *original uncomplicated* state; while by the term "calloused" or "surgical ulcer" is meant the uncured clinical ulcer which has existed for such a long period of time that it has taken on a state of induration and cicatrization. The difference between the two is only one of degree, but their existence is positively proven both by the operating table and the *post-mortem* room.

The justification for this classification is found in the fact that the medical man or internist has demonstrated *beyond a doubt* his ability to cure the clinical or medical ulcer *if he can but secure the persistent co-operation of his patient,* while the surgeon has become none the less skillful in curing the calloused type. Strange as it may seem, the converse of this is equally true, that the internist is powerless in the presence of the calloused ulcer, while the surgeon makes matters worse whenever he treats clinical ulcer by operation.

It is evident, therefore, that the responsibility will have to be divided between them, allowing the clinical ulcer to go to the internist and the calloused to the surgeon.

How then can we decide when an ulcer is of the clinical type and when it becomes calloused?

It is evident that the decision will be somewhat conjectural, for the fact that there is no pronounced line of demarkation abruptly separating the one from the other. The whole process of ulceration and cicatrization is one of profound slowness, marked by such slight individual graduations that exceeding nicety of judgment will be required in separating the one from the other.

But this we do know—that long continued ulceration in any part of the digestive tract will bring induration, cicatrization and deformity as certainly as the stars shine above us. This is a pathological law which can be as faithfully counted upon as that of gravity in the material world.

It must, however, be emphasized that no ulcer should be considered as calloused and no case should be operated upon until efforts at cure have been made time and time again without success. The average duration of one series of 500 cases operated by the Mayos in their earlier experience was twelve years, and results have shown that even after the abdomen has been opened, unless it is possible to palpably and visibly demonstrate the presence of calloused ulcer, operation should *not* be done.

*Read before the South Carolina Medical Association at Laurens, S. C., April, 1910.

Given a case, therefore, in whom repeated and repeated efforts have failed to cure, and which, notwithstanding, continues to suffer from pain, distress, nausea, vomiting, retained and decomposed food and starvation, the hour has arrived when operation alone will give the desired relief.

Notwithstanding the brilliant results obtained by the internist there will always remain a certain percentage of cases which for one reason or another will resist treatment and go on to the calloused type—to this class I address the following few remarks:

What is the logical consequence of uncured clinical ulcer and its unchecked cellular disintegration which has continued throughout a long period of time? Or, in other words, what would be the natural sequelae that any such chain of unbroken pathology would demand?

First—Reflex disturbances of secretion and dynamics, and consequently of digestion.

Second—An increased ulceration with perhaps perforation or hemorrhage.

Third—Cicatrization and deformity.

Fourth—Limiting adhesions between the stomach and adjacent organs.

Fifth—Obstructive stenosis of the pylorus or duodenum resulting in the retention and decomposition of food products.

Sixth—Carcinoma, and finally, terminal infections, such as subdiaphragmatic abscess.

That these are the sequelae and remote but none the less certain consequences of uncured gastric and duodenal ulcer, no careful clinical observer can deny, and yet, throughout all this host of resulting disabilities, there is one element which contributes perhaps more than all others to the patient's distress and suffering—I refer to the reflex and mechanical obstruction of the calloused ulcer. Its site is more commonly in the pylorus or upper duodenum, as this is the most frequent site of ulcer. The effect is just what would naturally be expected of such a condition—nausea, vomiting, pain, distress, retained and decomposed food and gradual starvation. The treatment is the commonest dictate of modern sewerage, namely, drainage. How can this be accomplished? By making an opening in the lowest portion of the stomach leading into the upper end of the ileum, performing the operation of gastro-jejunostomy.

The triumph of drainage of the stomach in this condition and by this means constitute one of the brightest achievements of modern surgery. It was not, however, without failures, reverses and disappointments by the thousands, that this operation was placed upon its present high pinnacle. One of the chief causes of failure was the fact that in its earliest days it became looked upon as a "cure-all"—the consequences were most disastrous—the operation was applied in cases in which we now know that it was not only useless but positively contra-indicated. The other great causes of failure were imperfect technique, on one hand and improper selection of site for the anastomosis between the stomach and jejunum upon the other.

On account of these evolutionary difficulties it became necessary in many instances to operate upon the same patient as often as two to five times before the desired results were obtained. In 500 cases operated upon by the Mayos there was such a large percentage of reoperations that the reoperations nearly doubled in number the cases reported. This is eloquent testimony as to the difficulties through which this operation has passed, and constitutes in itself a monument to the perseverance of the pioneers in this work. It may be considered that for the past three years the difficulties and dangers have been practically all eliminated. The technique is perfected. It is now possible to judiciously select cases for medical or surgical treatment, respectively. The internist cures 90 per cent of clinical ulcers, while the surgeon cures 90 per cent of calloused ulcers of all its symptoms with an actual mortality of only 1 per cent.

CASE REPORTS.

Acute Nephritis in Children.*

Wm Anderson, M. D., Bamberg, S. C.

Synonyms: Acute Catarrhal Nephritis, Acute Desquamative Nephritis, Acute Bright's Disease.

During the past eighteen months I have seen three cases of acute nephritis in children, a brief account of which I thought might interest the members of this Society.

The first was in consultation with the attending physician, and he had only been called when the symptoms in the case were of a very grave character. The subject was about four years old, and from the meagre history obtainable it was learned that about two or three months previous to this attack the child had a rash, which was thought to be "Roseola," (or Rubella,) and since then her urine had been very scant and high colored, accompanied by puffiness under the eyes and slight swelling of the face and body every morning. When I saw the case, there was a general dropsical condition, great restlessness due to difficult breathing from oedema of the lungs and pain over the kidneys, and an entire suppression of urine. Notwithstanding prompt and persistent treatment to relieve the symptoms by diaphoresis and draining the engorged vessels through bowels and bladder, convulsions ensued, with supervening coma, and the child died within 24 hours.

The history and symptoms in the two other cases were so similar that they can be embraced under the same heading. The patients were respectively eight and six years old, and had had no previous illness, except gastro-intestinal derangement and irritation. In fact, one of them was just recovering from such an attack when the kidney trouble manifested itself. These cases, although warmly clad, were unduly exposed to cold by being allowed to remain out upon the cold, wet ground too long, and while I know that some authorities state that the disease is very rarely produced in children in this way, yet I cannot but believe that cold is at least an exciting cause in children as well as in adults. The dropsical effusion about the eyelids first attracted the attention of the parents of the children, and this was soon followed by a general dropsical condition of the whole body, with difficulty in breathing, diminished flow of urine and constipation. There was also, when I first saw the patients, rapid and labored action of the heart, with slight oedema of the lungs, pain over both kidneys, highly colored, almost dark red urine, about one-third albumin in one case and one-fourth in the other, with a specific gravity of 1025 to 1030.

Both these patients made good recoveries, and so far (six to twelve months from attack) there have been no indications of a recurrence of the trouble.

The treatment consisted in hot baths, an active purge by calomel, podophyllin and aloin and the administration of five grains of cit. potash in half-glass water every three hours. The following formula I found very efficacious in dissolving the albumin and clearing up the urine:

Gallic Acid ..... 2 drachms
Acid Sulph. Dil..... 1½ "
Tr. Passiflora ..... ½ oz.
Inf. Digitalis q. s.....ad 6 "

Sig.: A teaspoonful three times a day in water. For an after treatment, Basham's Mixture.

*Read before the Cherokee County Medical Society.

FROM THE CLINIC OF DR. H. R. BLACK.*

By W. G. Sexton, M. D., Spartanburg, S. C.

The preparation for the adminstration of any anaesthetic begins with the education of the nurse or those attendants who have to do with the patient prior to its administration. The many horrible tales incident to the anesthetic which come to the patient's ears have much to do with the nervousness and dread with which the patient approaches the operating table and often postpones the operation, thus complicating the pathology. I so often hear patients say something like this: "I don't dread the operation, but I am afraid if I am put to sleep I will never wake up again." Instruct your nurse and attendants to have nothing to say about the anesthetic. Sometimes in their eagerness to educate the patient to the fact that the taking of ether is a pleasant dream, they excite suspicion which breeds timidity and nervousness. A few words well spoken by the etherizer when he enters the room is sufficient. Tell your patient the truth. Explain to him in certain stages it may be a little hard for him to breathe, but that this is a normal condition and will soon pass away. I have had many patients thank me for this little instruction and say if I had not told them such would be the case, the alarm at a certain stage would have been unbearable. Get and keep the confidence of your patient. Right here I wish to condemn the practice of so many operators in allowing inexperienced men to give their anesthetic. In the hands of an experienced man, ether is almost absolutely safe, but in the hands of ignorance its administration is horrible as well as dangerous. I wish to emphasize the point that no operator can become a past master until he can intelligently command his anesthetic.

*Read by title at the meeting of the South Carolina Medical Association, Laurens, S. C., April, 1910.

Although I have had some experience with the many different inhalers through which ether is given, I know of nothing so good as a gauze towel one yard square, folded until you have a pad nine inches square. It is something you always have, simple and not alarming to the patient, takes less ether and you can easily and uniformally administer the same through the gauze, which is always fresh and clean. I believe that we should learn to work with simple materials. The ether-cone and many different inhalers are a very unnecessary part of our paraphernalia, and to condemn them as a class would say that their mechanical effect is alarming to the patient, each has a certain humidity which is oppressive and prevents the free circulation of air so necessary to carry the ether to the patient. Plain gauze has none of these untoward effects.

In your instruction to the patient in regard to the manner of breathing, do not over educate him, or in other words, do not encourage him to take extravagant inhalations or exhalations. If so, later in the anesthetic the breathing is greatly oppressed and the patient apparently ceases to breathe. I have so often seen this that I call it the stage of alarm. I feel almost justified in saying that in a properly administered anesthetic you should have no stage of excitement.

How shall we give the patient ether? Feed it to him drop by drop. Give him what he can take comfortably and not one drop more. If you crowd the anesthetic before the special senses are conquered and the mucous membranes are benumbed, the patient rebels and the battle is on. Can any contrast be greater than the two pictures; one the struggle of a patient against a smothering anesthetic, the other the peace of a properly administered

ether. In the first picture we see the agony of gross ignorance; the second, a victory of pure intellect. There is no department in our grand profession where a little well administered intelligence will add so much to the comfort of the patient. You either win or lose the victory and the confidence of your patient in the first moment of the anesthetic. It is our rule to place the gauze, tent shaped, over the patient's face, the thumb and index finger controlling the gauze, the remainder of the hand splinting the lower jaw to the upper. Allow your patient to take a few breaths before any ether is put on the gauze. I believe this is a better plan than to start with ether on the gauze some distance from the face. These are small but important factors in a peaceful etherization. Do not interpose gauze between the patient's chin and the hand that is supporting the jaw. The gauze may be saturated and give the patient an ugly burn. Begin your anesthetic by putting one drop on gauze and give the ether continuously, gradually increasing progressively. Your patient can take more ether the second minute than he can the first, so why not feed it to him as he breathes. I could never understand why so many anesthetizers persist in pouring a quantity of ether into an inhaler and wait a minute and repeat the dose. Your patient is receiving inversely as he should not. He does not breathe in installments. Why then so give the ether. From the first drop of ether continue its application without intermission until you have reached the surgical anesthetic. There is no stage in a properly administered ether from the beginning until the patient is ready for the operating table, necessitating the suspension of the anesthetic. The step-like administration of ether is a great mistake. You give an excess of ether, prolong the anesthetic, water-log your patient and irritate the operator. In over one thousand anaesthesias at Spartanburg Hospital in the clinics of H. R. Black, M. D., we have averaged about four and one-half ounces to the patient. Time to obtain a surgical anesthetic, from five to six minutes. You can etherize any patient in this length of time by the continuous application of ether and make the anesthetic so congenial that your patient will not lift his hand from his side.

The relations of the operator and the etherizer should be just as careful while patient is under ether as when not, any unnecessary exposure or rough handling should be carefully guarded against. The barbarous use of sharp instruments for making traction on patient's tongue has emanated from authors who have no working knowledge of any anesthetic. Too much of our literature on this subject has come from compilers of therapeautics who never sat at the head of a patient. In many of our teaching institutions special lectures are given on the armature of the anesthetizer, detailing specially devised instruments as apologies for the ignorance of the etherizer. Would it not be better, and a little more humane, and more prophylactic to establish a chair whose business it would be to instruct students how to intelligently administer anesthetics and relegate the jaw forceps and the tongue harpoon to a barbaric and unthinking age.

Preceding the administration of ether by some of the lighter anesthetics seems to be the progress of the age. Although we cannot condemn progress anywhere we find it, yet I am sure this practice has an element of danger. If you have preceded your ether by any of the rapid anesthetics, of which ethyl chloride is an example, you have robbed yourself of a great deal of valuable information which is acquired from a close study of the patient's reaction to ether from the beginning of the anesthetic. The patient educates you as you progress in the anesthetic to his particular manner of breathing and other valuable symptoms which form the picture of submission to the anesthetic. For a like reason do we condemn a change of etherizers during any anesthetization.

The second conductor has not had a chance to study his patient and is not intelligent as to the stage of anesthesia. All good operators require the most intimate co-operation from their anesthetizers. Both are fighting a common cause. Never keep the patient more deeply under the anesthetic than is consistent with the work of the operator. A knowledge of surgical shock from manipulations on different parts of the body would be of infinite value to the conductor of the anesthetic. Traumatism in the region of the solar plexus, for instance, is often accompanied by great respiratory and circulatory depression, a fact with which the etherizer should be familiar. In an operation of ordinary length, from two-thirds to three-fourths of the amount of the ether will be given before the patient reaches the surgical anesthetic. Very little is required after this stage. No one sign or symptom as a guide should be relied upon in conducting an anesthetic. The picture is one of symptoms complex, of which the respiration is an important guide. The temporal artery is very accessible and you should keep in touch with the pulse. The conductor who relies upon the reaction of the pupil as an index to the anesthesia will often find himself in deep water. If you feel it necessary to frequently examine the pupil, do not touch the sensitive epithelium of the cornea with the finger. Slight traction over the supraorbital ridge will elevate the eyelid. Very exceptionally in the early part of the anesthetic at the stage when volition is about to be conquered, you are impressed from symptoms or signs that there is a battle raging between voluntary and involuntary forces, indicated by the patient's inability to take a deep breath. Give your patient one or two breaths of fresh air, he will pass immediately into a surgical anesthetic. Again there is that patient who is well under ether, yet his respirations are shallow and without force. He seems to appeal to you for a respiratory stimulant. Have the operator begin the operation and you will get a beautiful respiratory response from the touch of the knife. In other words, the knife becomes a respiratory stimulant in this condition. There is a certain class of patients who remain rigid late in the anesthetic. If you are sure that the surgical stage has been reached in your eagerness to relax the patient do not force the ether after the patient has remained in this condition for a short time. He will pass profoundly under its influence. Although the operator is and should be held responsible for any error occurring in the operating room the position of the anesthetizer is a most responsible one; and he should be a man of fine judgment and well experienced in his work.

There are many tragedies in our profession which are inevitable, but a man's carelessness in giving an anesthetic is his own fault, and more to be deprecated than the grossest ignorance. I cannot in this paper take up a discussion of the comparative merits of the different anesthetics, but I believe ether to be the less dangerous and the most reliable anesthetic of the day. When we are forced into an emergency and the anesthetic has to be turned over to an inexperienced man, ether should always be the choice. During the past three years we have given it in several cases of organic heart disease without any bad effects, due attention being given, however, to a uniform anesthesia. Ether is more lasting in its post-operative anesthetic effect than any other anesthetic; that is, the patient does not so often complain of that keen sting of the knife which lasts a few hours after any operation. This is another strong point in its favor, for no surgeon with any sense of refinement likes to be told by his patient that he feels the sting of the knife.

If your patient attempts to interfere with the administration of the anesthetic, do not forcibly pin his hands to his sides; simply control them; any attempt at vio-

lence excites your patient and produces a struggle. I believe the battle can be won by gentle and kind decision.

Let us study this great agent more closely and become more expert in its daily use.

Of all the glorious achievements of the past century the discovery of chloroform and ether anesthesia was perhaps the greatest. The names of Morton, Simpson, Long, and our own Willhite deserve to rank along with the other immortals of earth.

April 18th, 1910.

MINUTES OF THE OPENING OF THE SCIENTIFIC SESSION.

LAURENS, S. C., WEDNESDAY MORNING, APRIL 20TH, 1910.

Meeting called to order by the President.

Invocation—Rev. W. E. Thayer.

Almighty God, our Heavenly Father; we recognize and acknowledge Thee as omnipotent and omnipresent.

We come into Thy presence this morning seeking a Father's blessing upon us; grant, O Father, that everything that shall be done during the deliberations of this Association may be done to Thy glory, and to the betterment of humanity. Let Thy richest blessing rest upon these men, who have consecrated their talents and energies to the alleviation of suffering; and grant, O Father, that each one of them may come into personal acquaintance with the Great Physician, who healed the diseases, not only of the body, but of the soul and mind; and grant, O Father, that the deliberations of this body may be for the advancement of the science for which they stand; and grant that more good shall be accomplished through their coming together.

We ask it all in the Name, and for the sake of Jesus Christ, our Redeemer. Amen.

ADDRESS OF WELCOME.

DR. H. K. AIKEN, CHAMBER OF COMMERCE, LAURENS.

Mr. President and fellow members of the South Carolina Medical Association:

I have, on several occasions in recent years, endeavored to make various bodies of men coming among us feel at home, but never before have I felt the same degree of satisfaction in doing so as I do to-day, for I think I know and understand the Doctors. For once the rabbit has been thrown into the briar patch.

When I arrived, a new citizen on this mundane sphere, the first man with enterprise enough to take me by the hand was a doctor, and I have liked the members of the profession ever since. I thought so well of them that after reaching years of maturity I decided to become one, and I see around me to-day some at whose feet I sat to learn, and others with whom I went through the fiery furnace of final examinations.

After graduation I drifted up into these wilds, and practiced here for some years, but the soil and climate and air of these Piedmont foot-hills is so fine, and the habits of this people so correct, that they have very little need of doctors, and I soon discovered that to escape starvation, I must develop some side lines.

These people up here take very little medicine. They are very much like their neighbors just across the line in the North Carolina mountains, who have a song they all sing one verse of, which goes something like this:

"I like corn liquor,
I ain't afeard uv rye,
Ef the doctor don't come to see me,
I'll live 'till I die."

(Laughter.)

We are glad to have the State Medical Association with us again, after a long absence, and we want every one of you to enjoy your visit.

I had prepared some weeks ago a very lengthy, learned and languid address to be inflicted upon you this morning, but when the programme came out, my friend, Dr. Dial, called my attention to the fact that he, too, was down to do some welcoming himself, as the representative of the Laurens County Medical Society, and that if I attempted to punish you with too many of my platitudes, he would have me called down. I told Dr. Dial to come on and we would do as the two Irish tramps did when they walked into a ticket office and inquired the distance to Dublin. "Twelve miles," was the answer. "Let's ride," said one. "Oh, come on, let's walk," said the other; "that's only six miles apiece;" so they set out to walk it.

At a lonely spot in the road they encountered a solitary foot-passenger travelling in the opposite direction, and to replenish their financial reserve, decided to hold him up. He proved to be a brawny young Scotchman. After a long, fierce combat, in which the Scotchman almost got the best of the pair, they finally subdued him. A thorough search of his person disclosed one lone five-cent piece. "By hivins, Moike," said Tim, disgustedly, "if that fellow had had tin cints, instid of foive, he would 'ave murdered the two av us." (Now that it is out and past recall, I rather regret my use of that word "murder." It may prove a mental suggestion that, dominating your emotions in a few minutes, will prove disastrous in its consequences to the two speakers of the morning, so I am going to hasten to conclude.) Laughter.

We welcome the State Medical Association to our city for the reason that the doctor is always among the influential men of any community. Herbert Spencer, in his "Essay on Education," asks the question: "What knowledge is of most worth?" and replies to it by saying: "The uniform answer is science." This is the verdict on all counts. For direct self-preservation, or the maintenance of life and health, the most important knowledge is—Science. For that indirect self-preservation, which we call gaining a livelihood, the most essential knowledge is—Science.

For the interpretation of national life, past and present, without which the citizen cannot rightly discharge his obligations, the knowledge of greatest value is—Science. Alike for the most perfect productions and present enjoyment of art in all its forms, the needful preparation is to be found in science. And for purposes of discipline, moral, intellectual or religious, the requisite knowledge is once more—Science. Because he is a scientific man, and therefore emancipated from much fear and superstition that haunt the fallow mind, the doctor has sometimes been criticised for being a materialist, or at least, a free-thinker.

While it may be true that to the doctor the sleeping and the dead are but as pictures, and he refuses to be affrighted by the painted devil which the eye of childhood fears, it is also true that the more we learn the better we understand that these human bodies,—these material, mortal, ponderable things of time and sense,—with which we daily deal, are at best but evanescent, and that the invisible things of this world alone are the true eternals. The jagged fork of lightning that splits an oak, or the silent lifting power of the sun's rays, as they hoist millions of tons of sea water into ethereal reservoirs, to be returned upon a parched world; the silent cohesive force that keeps this stupendous globe from flying into fragments as it whirls through space at something like 1200 miles a minute; all these things have existed since the beginning of time, but they cannot be analyzed. For that reason shall we deny their existence? I know, and you know, that when the Maker and Master

of this world moves the lever of a life upon the switch-board of time from a contact marked "mortal," to one marked "immortality," that the lamp of life that goes out, perchance in a hovel here, instantaneously comes on in a palace of eternity. Truly, he has learned but little who cannot see that the "great lesson of science for us all is *faith* in the intangible and the invisible.

Walking beside the seashore one day, Dr. Oliver Wendell Holmes picked up the shell of a snail. As he studied and examined it with all the naturalist's love for such things, and then musingly looked out upon the moving, mystical deep, his reflections, poured through the prism of that superb intellect, gave to the world of letters that perfect literary pearl which we know as "The Chambered Nautilus." Of the divine significance of Life he admonishes us in the familiar lines:

"Build thee more stately mansions,
O my soul,
As the swift seasons roll!
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,
'Till thou at length art free,
Leaving thine outgrown shell by life's unresting sea!"

For melody and finish, for wholesome sentiment and sublime earnestness, nothing grander was ever penned in this or any other country.

Yielding to the inspiration that flows in upon one who, on a day like this, in a place like this, stands before an audience like this, I have already trespassed longer than I had intended upon your marked attention, and for this I must beg your pardon.

(Applause.)

The President:

"Gentlemen: In behalf of the Association I want to thank these gentlemen for their earnest words of welcome. I can assure you that we are glad to be here in the County of Laurens, and we want this meeting to go down in our annals as one of the pleasantest and best meetings of the Association.

We are extremely grateful to you for your hospitality."

The President's address, published in the April issue of the *Journal,* was then delivered.

Dr. S. C. Baker: "Mr. Chairman, I move that a committee of three be appointed to consider the President's address and report back to the Association."

Seconded by several and carried.

The Chair appoints on that committee: Drs. S. C. Baker, A. J. Jervey, Robert Wilson.

The President:

"The next thing on the programme is a paper by Dr. Charles Hunter Dunn, of Boston. Dr. Dunn has not yet arrived, but we have with us a man who is doing a magnificent work along the lines of educating the householder in prevention of disease.

I propose to extend the courtesies of the floor to Dr. Hutchinson and ask him to address the Association along the lines of the great work that he is doing for us."

Dr. Woods Hutchinson, New York:

"Ladies and Gentlemen: This is an age of new things. We have the New South, which I have been visiting with pleasure and delight for the last six or eight weeks now; we have the new woman, who is present with us in all her beauty and culture; and we have the new doctor, who is also present with us.

The new doctor is a somewhat different individual from the old one, and in some respects I have the hardihood to think that he is almost as good as the

old one. He is becoming more of a public character. He is no longer content to take his place at the bedside and satisfied to be one of the disfranchised class,—with the minister. He is of the better class of society. He has taken his place in the world and is doing his part of public work. The doctor is beginning to preach, as we have heard eloquent testimony this morning; and the minister is beginning to practice, and the millenium is going to come pretty soon." (Applause.)

"The hope that the doctor had that he was going to be one of the "king pins" of the future arrangements of society is possibly not lacking in fulfilment.

I do not know that our expectations and hopes as to what we are going to be in the future is as great as that of our colleague, the learned professor, who is said to have preached a sermon upon one occasion and wound it up, (getting somewhat excited,) about as follows: 'Not a sparrow falleth but his God doth know; and the same hand that made the little sparrow made me; the same hand that moulded the heavens, moulded me; the same hand that shaped the mountains shaped me; the same hand that put the veins of gold and silver through their numerous strata, made me; and, gentlemen, the God that made *me*, made a daisy!'" Applause.)

"Of course you all understand what he meant.

But the future of the profession, the part that is going to be played by the new doctor, is, I think, a cheering and inspiring subject from every viewpoint. I think we are getting to the point when we will no longer be called in to lock the stable-door after the horse is stolen; when we are called in to patch up and make the best of a bad job, and to cure disease after it has gotten a hold. We want to do some work in warding off disease; in storing the life and protoplasm of the community, just as did the Great Wizard. He did not want to merely record its changes in the dead room or to freeze them under the microscope and see what the tissues were after death; he said he wanted to get life into his hands; to play with it; to influence it at his will. That is what the doctor wants to do with the human protoplasm; and I believe the doctor will become one of the most valuable public officers that we have, and not merely in value in his private study and research, but in every capacity, as he is beginning to be to-day.

I think a beautiful illustration as to the value of the doctor may be gotten as to what he is to-day, from this: You know bacilli is more deadly than bullets, and sewage is more deadly than the sword. The mortality in recent years has been five times as much from those things than bullets. And I think the way the doctor can elevate the community is illustrated by Lord Kitchner, in the Soudan. He took his army nine hundred miles from any civilized base of supply, through communities infected with typhoid and malaria and smallpox. He started nine hundred miles from the firing line. He had his food hermetically sealed; he had his camp thoroughly inspected, to see that it was free from mosquitoes and flies. Now heretofore it had been considered a fine thing to land sixty-five per cent. of troops in passible condition at the front, and the general who did that was thought to be doing pretty well. Kitchner landed ninety-five per cent. on the firing line, after having marched a distance of nine hundred miles, and these troops went immediately into action and crushed the enemy in a single battle!

That is what medicine is going to do in war and in peace. And it is only a question of time when the magnificent speech delivered by Senator Owens on creating an office in the Cabinet will bear fruit,—which will give us the dignity which is really ours.

We are no longer satisfied with simply curing,—we want to prevent. We do not want to take the place of the Chinese

physician exactly in the community, but we ought, I think, to be engaged by the year as a family physician and inspect the premises and inspect every member of the family, and advise as to their condition instead of waiting for them to come to us after they are ill. I believe this would eventuate in a higher type of men. In China the doctor is paid so long as his patient is well. In America the doctor is paid so long as the patient is sick. If the Chinese physician's patient gets sick, his remuneration ceases. If the patient dies, (if the family be very influential,) the doctor does not take an active part in public affairs after that. He is not, at least, expected to appear in public again." (Laughter.)

"We should engage to keep our patients well, and do the best we can for them, instead of trying to cure them after they are sick.

We do not give drugs now when illness occurs in that confiding spirit that is said to have been felt by one of our colored brethren in the South, who was practicing medicine among his own people. He was called to attend a case of perforation in the abdomen from gunshot wounds, and a white physician happened to be called to the same case, but he got there after the colored brother, so left him there.

The colored doctor prescribed a very large pill, so large the patient could hardly swallow it, and the patient recovered in ten days' time without peritonitis,—without anything. The doctor met the colored gentleman on the street a few days after the patient was out, and said: 'Look here, I just want to know, as a matter of curiosity, what you gave that nigger to make him well.' The colored brother, very much elated, puffed out his chest and replied: 'Why sutinly, sir. If you don't know nothin' at no time, jest come to me.' He said: 'Well, what *was* in that pill?' He said: 'That pill, sur, was made up of alum and rosin, sur, of equal parts, sur.' 'Why *on earth* did you give him *that?*' 'Why, sur, I shore am surprised at you, to hear sich a sensible gentleman ask sich a fool question. The alum was to pucker the parts together and the rosin was to make 'em stick!' " (Laughter.)

"We don't give drugs exactly in that way any more. We are more concerned with correcting the errors of the living individual. We are working for the uplift of society; for purity of food; we are working for pure air; we are working for simple justice—to see that each man gets his fair share for the labor of his hand and brain; for improving and building up to higher and higher levels the health and the welfare and the happiness of the community.

I think it is not too much to say, as that learned educator, ex-President Elliott did, that 'the religion of the future is going to partake more nearly of the nature of the physician than any other calling.' I am sure that we all have the feeling that our mission in the profession is the greatest thing in the world. We have the wish that what we shall be remembered for is not for great feats upon the field of battle, or for wonderful accomplishments in the field of legislation, but the immortality that we want is the immortality that we can all gain, and which is so beautifully typified in those lines of George Elliott's:

'O may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence; live
In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
For miserable aims that end with self,
In thoughts sublime that pierce the night like stars,
And with their mild persistence urge man's search
To vaster issues.

May I reach
That purest heaven, be to other souls

The cup of strength in some great agony,
Enkindle generous ardor, feed pure love,
Beget the smiles that have no cruelty—
Be the sweet presence of a good diffused
And in diffusion ever more intense.
So shall I join the Choir Invisible,
Whose music is the gladness of the world.'"

The Chair extends to Dr. Hutchinson the thanks of the Association for his excellent address.

Telegram read from Dr. George Ben. Johnson, of Richmond, regretting his inability to attend the meeting as he had anticipated.

Paper by Dr. L. B. Morse, of Hendersonville, N. C.,—"Pulmonary Tuberculosis—The Persistent Need of Earlier Diagnosis,"—printed in another part of the *Journal.*

Chair extends the thanks of the Association to Dr. Morse for his paper.

Dr. I. T. Taylor, of Morganton, accorded the privileges of the floor.

Dr. Rolfe E. Hughes:

"Dr. W. H. Dial was detained and has asked me to read his address in his stead.

I am very much in the position of the old colored woman, who came into the Probate Judge's office and said: 'Jedge, is you the Jedge of Reprobates?' The Judge replied: 'I am the Judge of Probate. What can I do for you?' She said: 'My husband, you know, well, he died a few days ago an' lef' 'leven little infidels, an' I wants to be 'pinted executioner for them.'" (Laughter.)

Mr. President and Members of the South Carolina Medical Association: In extending you a welcome we may indulge the hope that this family reunion of County Societies will prove to be both socially and scientifically one of the most helpful, *in fact, the* most helpful, in the history of the Association; enthusing new life, inspiring the minds and hearts of young and old to greater zeal and energy, as they go back to take up the trying and responsible duties of their chosen profession; the noblest of *all* professions feeling that it was good to have been here.

You are sixty-two years old to-day; your daughter, our County Society, is twenty-four. Twenty years ago you were with us and showered many maternal blessings upon us.

We wanted you back, we have you, you are as welcome as a *grateful, faithful* daughter can possibly assure you. We are delighted to have you; and as the nurse of your loyal child, (as we revert to the days gone by when you were here before, she was then but a baby in swadling clothes, and needed soothing syrup, but am *proud* of my charge as I present her to-day *full grown,* numbering *every* physician in the county as her devotees, as your hostess, on this her twenty-fourth birthday.

Twenty years have come and gone
  Since you were here before,
We are glad, yes, truly glad
  To welcome you once more.

Our city gates we open wide,
  To you for to-day;
And hope for all while here with us,
  A jolly pleasant stay.

Thus your daughter of twenty-four
  Summers, bright and gay,
Extends her hand, being truly glad
  To welcome you to-day.

So here's her heart, as well as hand,
  Accept them both we pray,
For she is glad, yes, *more* than glad,
  To welcome you to-day."

EDITORIAL.

PREVENTIVE MEDICINE.

One of the greatest advances made in the field of medicine has been along the lines of prevention; one of the greatest triumphs of the age in any time, namely, the conquest of the tropics by the whites, has been a result of the development of preventive medicine; and the greatest achievement, among the many great ones, wrought by this country, has been the demonstration of the practical and beneficial application of the rules of health and hygiene as applied systematically and sensibly.

And yet, most of us are content to drift along and allow our constituents to drift with us in the same old ways our fathers and grandfathers drifted, treating the people when they got sick, praising ourselves when they got well, and praising God when they didn't. Did *you*, Doctor, ever stop to blame yourself when one of your clientele got sick with some preventable disease? Did *you* go to them before hand and tell them they should not allow the seeds of disease to be implanted among them? Doubtless you did, but in what instances? Most probably where there was already a dread of some disease as smallpox, or diphtheria, or scarlet fever; but how about malaria, or hookworm, or typhoid fever, or wound infection, and dozens of other diseases, especially the various bowel complaints? Have you told parents how to prevent the incidence of cholera infantum, and of summer diarrhoea? Have you explained why breeding places and mosquitoes should be destroyed, why flies should be kept away from food and wounds, and why they should be prevented from breeding? Have you told your patients why they should not spit or why they should not sleep in the same bed with others—have you done your duty as an up-to-date physician? And if not, why not?

The province of medicine is rapidly changing from that of the therapeutist to that of the hygienist, and accompanying this change there is an increase in the life expectation of every infant born and a decrease in the ills to which he might expect to fall heir.

In order that we might not fall behind the medical procession we must get into line and become the guardians of the public health and not the dosers of the sick and the mourners of the dead.

And so much for our abstract duties. Now, what are we to do about it?

First:—Teach the public. Each of us can instruct our own circle of practice as to the necessity of observing hygienic laws and how to observe them. We can show them how to screen their windows, especially their kitchens, their dining rooms and their bed rooms against both flies and mosquitoes. We can assure them that mosquitoes carry yellow fever, country fever and elephantiasis. We can advise them as to the cleaning of their premises and surroundings, leaving no breeding places for mosquitoes or flies, for mosquitoes breed in standing water and flies in filth, especially garbage and manure piles; and a small expenditure of kerosene or of crude oil for the mosquitoes, or of copper sulphate or of unslaked lime and a little time and energy for the flies, will serve to help not only their comfort but also their health. We can show them the necessity of having proper privies to provide for the disposition of the excreta both so that the flies cannot reach it and so that no spread of disease from it may occur. We can assure them that should this not be done such diseases as hookworm, dysentery, cholera and typhoid fever may be spread broadcast, and we should show them where and how to place such privies and how

to prevent the spread of organisms of any sort therefrom.

And a most important matter—we should look into their water supply as well as their food and milk supply, and if they are faulty, show them how to correct these faults and why. We can cite to them results if they are in doubt, and we can by so doing work wonders.

The time was, not so many years ago, when a doctor who insisted on proper hygiene was considered a freak and a faddist; but, thank God, that time has gone by and the people are demanding more and more that we prevent them from contracting disease rather than cure the disease after contraction. The old idea was largely fostered by the medical men themselves, many of whom made fun of "the new-fangled doctor with his germs and his microscope," of "the eagle-eye of the magic man in the laboratory." Now the tide has turned and "the new-fangled doctor" has the best laugh, getting both the practice and the results.

The people at large are waking up and asking questions for themselves, as, why is Havana now healthy? Why did the French fail with the Panama Canal and the Americans succeed? Why were the Japanese soldiers so much more effective than the Russians? Why did yellow fever not spread in Louisiana or Texas in recent years; and finally, why doesn't *my* doctor show us how to avoid disease? If *"my"* doctor doesn't show him, he is going to get one who can and will—and he is right. It is our province and privilege to prevent disease and suffering, and should we fail to make our best endeavors in this line, we should deserve to lose out in our chosen work and to see our practice go to others more capable or more conscientious.

THE SURGEON AND THE PATIENT.

It is interesting to watch the swing of the pendulum in medical and surgical matters—now to one extreme and now to the other, and to speculate as to just what point on its arc measures the true balance.

Many, many years ago, the whole aim of the surgeon was dexterity and dispatch. This was forced on the operator by the suffering of the patient operated upon with no anaesthetic—hence speed was necessary. Likewise an intimate knowledge of anatomy, especially of the blood supply, was a necessity, owing to the lack of mechanical appliances for the checking of blood; also the nerves must be avoided on account of shock. Manual dexterity was a *sine qua non* that speed might be obtained; and the patient himself, unanaesthetized, obtruded himself upon the surgeon and prevented his being forgotten in the zeal of the operator.

With the introduction of anaesthetics came a rapid reaction from the haste of preanesthetic days, and there resulted a time of much attention to details. As yet, however, much of the human organism remained unfamiliar ground to any but the boldest surgeons, for asepsis had not yet become known. But with Lister, there began a period which might be likened to the period of the exploration of the world following the voyage of Columbus—only the human body was the world so explored. With the anaesthetic removing the patient's personality from obtruding itself upon the surgeon, and the antiseptics allaying the fear of approaching the serous membranes, the zeal of the explorer led the surgeon to forget both time and patient and to make extensive experimental and exploratory operations. At the same time the tissues were drenched with powerful antiseptics to kill any germ which might have found lodgment there. This was the time of minute attention to detail with no thought of using the patient's own powers. As a result great advances in surgery were made, but many patients died. After brilliant operations, complete in every detail, lasting several hours, the patient "in spite of all that was done for him, or her," succumbed.

Again the swing of the pendulum:

When Wright's investigations demonstrating the marvelous recuperative powers present in the patient himself placed the "let well enough alone" policy on a scientific basis, another swing began and now we find the watchword: "Consider the patient." As Morris once said: "It is better to have an incomplete operation on a live patient than a beautifully finished one on a corpse." We are no longer drenching the patients with antiseptics, no longer keeping them hours under an anaesthetic, we no longer explore every possible nook of the abdomen, or of the cranium, or of the thorax, and do every possible operation at one sitting—in fact, there is much surgery that we no longer do—and more patients get well. Instead, we use to a large extent the patient's own power of recuperation, as for instance, applying Bier's principles to many cases where the knife was formerly used, and as a result we find less of both morbidity and mortality.

Just how far the pendulum will swing this time, we cannot even guess; we can only ask—What next?

SERUM AND ORGANO-THERAPY.

So frequently we hear of advances in one or another department of medicine which are to completely revolutionize medical science, and then see these much touted additions to our armamentarium relegated to the dust bin, that many of us are growing skeptical when some new idea is advanced. This skepticism is due in a large measure to the too exaggerated claims made for any one object; and, while good in so far as it prevents us from running too hastily after the new and untried methods, is harmful when it prevents our accepting things which might be of much value to us. Of course, the proper and desirable mental state in viewing any new or old idea brought to our consideration is the calm, dispassionate one which allows us to weigh carefully both the merits and the demerits of each case and balance them one against the other. Not so very long ago tuberculin was heralded as a sure cure for consumption, and a rash use of this valuable agent brought discredit to its use. Then the Roentgen ray was hailed as the great philosopher's stone of medicine—to accomplish miracles of cure and rejuvenescence; then radium ran the gauntlet along the same lines of extravagant laudation; trypsin as a cancer cure, stovaine as a substitute for general anaesthetics, and numerous other idols have been hailed as gods. And each in the reaction of disappointment has been hurled from its pedestal and reviled by its former ardent worshippers. Now, each of these has its own sphere of usefulness—generally limited, it is true—and each deserves its meed of praise. But let us learn the lesson from the past disappointments and not require too much of whatever new may be brought to light. We might as well realize at the beginning that there is no elixir of life, no fountain of youth, no pantherapeutic agent. When we realize this we will not be so ready either to acclaim or to condemn new agents.

Among the comparatively new therapeutic agents brought into prominence within the past few years have been the various sera and vaccines and extracts, and so important a place have they assumed in our armamentarium that there has arisen already a rather new nomenclature—we have vaccine therapy, serum therapy and organo-therapy. With sera of various sorts we are no longer in the experimental stage—their value within certain definite lines is assured; with vaccines we are just emerging from the stage of experiment and are learning to apply them intelligently; and with organ extracts, save a few, we are still in the observation stage. There is no doubt that these various results of animal experimentation are most valuable aids to us, and that they have proved a distinct advance

in medical science and have revolutionized many of the old ideas of treatmetnt, but there is likewise no doubt that their field of usefulness is sharply limited, and that we should not expect them to exceed their rightful bounds, nor condemn their use because we have used them wrong. We must realize that we are working (with sera and organ extracts more particularly) with products manufactured in a laboratory over which we cannot have absolute control—the animal organism—and that consequently we must expect to find a certain amount of variation in our results. This variation does not vitiate the value of the newer methods of treatment, but only renders caution and discretion more necessary. Daily, experiments are going on in the development of new sera and vaccines, and daily new items are added to the sum of our knowledge. One of the most recent sera which has emerged from the laboratory as having passed the rigid tests of safety and efficiency is the anti-meningococcic serum, of which Dr. Dunn writes so ably in this issue of the *Journal.* We commend its study by the profession.

THE UNIVERSITY COLLEGE OF MEDICINE IN RICHMOND.

The following extract from one of the Richmond papers is of interest to the medical profession. We congratulate the profession of Virginia on their enterprise in so quickly rebuilding the University College of Medicine, destroyed last year by fire, and on having so earnest a worker as Dr. J. Allison Hodges laboring in their behalf. We wish them all success.

UNIVERSITY COLLEGE OF MEDICINE.

News of the success of the campaign for the rebuilding fund of the University College of Medicine is deep cause of congratulation to all Richmond. Dear to the hearts of the medical profession, the purpose has been followed with untiring patience and pertinacity. There remain but $27,000 to be subscribed to put the college back upon a plane of higher usefulness than it occupied before its destruction. Considered in the light of what has been done, this amount is a bagatelle. The college that has been a hopeful project has become a welcome fact.

At the meeting at the Country Club, at which the success of the plan was definitely announced, there was presented to Dr. J. Allison Hodges a loving cup in appreciation of his untiring zeal in the interest of the college. He has in this purpose neither hesitated nor desisted. In the company of his brethren he has been a leader. To have received at their hands a testimonial of this character is, of course pleasing to himself and his friends. Pleasing as it was and gracious as was the thought, the cup and the sentiment which caused its gift are, however, but the courtesy that now and then adds the savor of gratitude to labor.—Richmond *Virginian,* July 1st.

SOCIETY REPORTS.

Abbeville, no report, 2d month.
Anderson, no report, 4th month.
Aiken.
Bamberg, no report, 4th month.
Barnwell, no society.
Beaufort, no report, 4th month.
Charleston.
Cherokee.
Chester. no report, 4th month.
Clarendon, no report, 4th month.
Colleton, no report, 3d month.
Darlington, no report, 4th month.
Dorchester, no report, 4th month.
Edgefield, no report, 4th month.
Fairfield, no report, 4th month.
Florence, no report, 4th month.
Georgetown.
Greenwood, no report, 4th month.
Hampton, no report, 4th month.
Horry, no report, 4th month.
Kershaw, no report, 4th month.
Laurens, no report, 4th month.
Lee, no report, 4th month.
Lexington.
Marion.
Marlboro, no report, 4th month.
Newberry.
Oconee, no report, 4th month.
Orangeburg, no report, 4th month.
Pickens, no report, 4th month.
Columbia, Richland Co., no report, 4th month.
Saluda, no report, 4th month.
Spartanburg.
Sumter, no report, 4th month.
Union, no report, 4th month.
Williamsburg, no report, 4th month.
York.

REPORTS—COUNTY SOCIETIES.

AIKEN.

Medical Society Meets.

Interesting Session Held Monday in the Masonic Hall—Pellagra and Measles Discussed.

The regular monthly meeting of the Aiken County Medical Society met Monday at its usual place of meeting in the Masonic Hall. There was quite a good crowd in attendance to enjoy a very excellent paper by the President of the Society, Dr. Whitlock, which was discussed by Drs. Harry Wyman, Croft, and A. C. and B. H. Teague. By a resolution offered at a previous meeting, the time of meeting of the Society was changed from the first Monday to the third Monday in the month, which was thought to be just as convenient as the first. Monday is sales day, many were taken up with business, and failed to attend the meeting of the Society. One of the most interesting phases of the meeting was the exhibition, by Dr. C. A. Teague, of Graniteville, of two of his pellagra patients, and as this dreaded disease has been recognized in a comparatively recent date, many of the profession have not had an opportunity to see a case, and of course were very glad to be present and to have the opportunity of examining the symptoms and condition of the patients closely. Dr. Teague reports that there are, in and around Graniteville, at least ten cases of pellagra. At the request of the Society Dr. Teague has consented to read a paper on the subject of pellagra at the next monthly meeting of the Society, the third Monday in July, and present other cases that he has on hand. That day will be taken up entirely with the paper on pellagra, its discussion and exhibitions of climate cases. It is hoped that the Secretary of the Society will be able to secure the attendance of Dr. J. M. Babcock, of Columbia, at the next meeting. Dr. Babcock is recognized as the greatest authority in America on this disease, and the first to call the attention of the profession to it in America. His coming will no doubt cause a very large meeting of the Medical fraternity and it is hoped also of the laity, who are always welcome at these meetings. After adjournment Dr. H. J. Ray invited the entire Society to dine with him in his beautiful and hospitable home on the outskirts of Aiken,

where the charming hostess had prepared a most sumptuous and delightful dinner, exquisite in its beauty and service, and greatly appreciated and enjoyed.

MARION.

Mullins, S. C., June 24, 1910.

Dr. J. C. Sosnowski,
Editor, The Journal,
Charleston, S. C.

Dear Mr. Editor:

Although a letter from this County is as rare as whiskers on a Chinaman or a "day in June," or Ben Jonson, or any other thing or person, whatsoever, that may be rare, singular, or unusual, it is no index of our true situation, but due rather to epistolary negligence on the part of the "present encumbrance," for we have a live and healthy organization, as the following brief report will demonstrate.

The regular monthly meeting of the Marion County Medical Society was held in the Chamber of Commerce last Monday evening. The president, Dr. E. B. Utley, announced Ileo-Colitis as the subject for discussion. This was ably lead by Dr. Zach Smith, followed by Drs. Sam Mace and A. M. Brailsford.

In order to stimulate interest in these gatherings, a topic is chosen at each session, to be debated at the next regular convention. Members are duly notified and urged to prepare themselves to participate in the discussion.

One of the regrettable but inevitable results of the division of Marion County has been the loss of some good members from the Dillon section. However, the County Societies of the Pee Dee country are very closely drawn together by means of a flourishing District Association. So, neither County lines nor politicians can entirely separate us—or even disturb the *esprit de corps* in matters medical.

Fraternally yours,
A. M. Brailsford, M. D.,
Secretary.

SPARTANBURG.

The Spartanburg County Medical Society held its regular monthly meeting on June 24th, with the largest attendance of the year. The essayists appointed to read papers at this meeting failed to appear or to send in their papers, so after the regular business was finished, the Society discussed the work of the anti-tuberculosis league and the advisability of retaining a nurse to help carry on the work. It was decided to support the league in its efforts to secure funds from the city to pay the salary of the nurse. At the next meeting of the Society one of its members will read a paper on the prevention of tuberculosis, and the nurse in the employ of the anti-tuberculosis league will be invited to attend.

L. Rosa H. Gantt,
Secretary.

GAFFNEY.

Gaffney has a new hospital in sight, several of the physicians here are interested in it and devoting their energies toward its success. The site has been chosen. The charter obtained. They are incorporated at $20,000, and have about $10,000 subscribed.

Yours truly,
J. G. Pittman.

YORK.

York County held its regular meeting, July 5th, in Rock Hill. It was not a full meeting, but a very instructive one.

Dr. M. B. Young's paper on Hookworm was enjoyed by those present and was freely discussed. Dr. J. R. Miller's paper on Dysentery was another instructive paper and the discussion was fully entered into and was beneficial to all.

Dr. Bigger reported a case of Perforation in Typhoid, when diagnosed by him in male at beginning of second week of illness. Operated upon by Dr. W. W.

Fennell. Patient doing nicely. This operation was three weeks ago.

Meeting adjourned to meet in Yorkville, first Monday of September.

BATESBURG.

There will be a meeting in Batesburg, July 21, for the purpose of organizing a District Medical Association.

CHARLESTON.

The meeting of the Medical Society continues to be well attended, in spite of the fact, that during this season the attendance usually falls off. The meetings are not only well attended, but the members are all taking an active interest in the scientific and business affairs of the Society, numerous interesting reports and discussions taking place.

The sale of the old Roper Hospital is still pending, but the building has been torn down and four cottages and one three-flat house has been erected thereon by the intending purchasers, there being no doubt that the sale will be completed.

A portion of the grounds adjacent to the Medical College, measuring 50x100 feet, has reverted to the Medical College and will be used for the erection of new laboratories when needed.

The Catalogue of the Medical College of the State of South Carolina is now out, announcing many improvements. The course will be extended until May 31. The entrance requirements are now four full years high school course. The co-ed feature has been abandoned. Among the additions to the faculty, are, Dr. Sosnowski, Dietetics and assistant in medicine; Dr. Matthew Moore, assistant in medicine and nervous diseases; Dr. Rhame, assistant in Histology, Pathology and Bacteriology.

Dr. Robt. Wilson, Jr., accompanied by Judge Purdy and Dr. Babcock, of the State Asylum, made a tour of many of the cities of the country, for the purpose of inspecting various hospitals for the insane. These gentlemen are on the Committee appointed by the Legislature for the proposed new State asylum. During the trip they visited the asylums in Illinois, Buffalo, Boston and New York.

On June 24th, Dr. John L. Dawson lectured at Aiken, S. C., before the teachers of the Summer School and general public, on tuberculosis. This is one of a series of lectures on health in which Dr. C. F. Williams and several others of the State will participate.

Miss Katherine Magrath, surgical nurse, and Miss Cappleman, anaesthetist, of Dr. A. E. Baker of this city, have returned from a professional trip to the West, having visited the clinics of the Mayos, in Rochester, and Murphy and Ochsner in Chicago.

During the month of June, there was a mild epidemic of variola in this city, with about twenty odd cases reported. The outbreak was soon controlled and for some weeks there have been no case reported. Mayor R. G. Rhett complimented Dr. J. M. Green on the work of this department in connection with the outbreak. Assisting Dr. Green was Dr. Edw. F. Sparkman of this city.

Dr. Robt. Wilson, Jr., Dr. Jno. L. Dawson, Dr. Aimar and Dr. A. E. Baker attended the Convention of the A. M. A. in St. Louis in June.

Drs. Aimar and Baker spent some time at the clinic of the Mayos in Rochester while in the West.

NEWBERRY.

Dr. O. B. Mayer on Thursday, May 26, delivered before the Woman's Club of Newberry, an address on "Civic Improvement." After speaking of some of the old cities and citing certain cities, which, while themselves beautiful, yet suffered from the result of poor sanitation, he then came down to a nearer time and spoke of the failure of the French Government to construct the Panama

Canal, this failure being due to the poor sanitation more than to any lack of business management. He spoke also of the City of Havana, which has been a pest house until it fell into the hands of the United States during the Spanish American war, and described the results of proper sanitation which followed the American occupation, which results succeeded in placing Havana among the healthy cities of the world. As Dr. Mayer said, "our country went to work and blotted out this disease (yellow fever) by the civic improvements which we made in the city. This discovery, due to civic improvements, will enable the United States to complete the canal . . . . . The honor of the completion of the Panama Canal should be prized by every American, but the greater honor, that of removing from the world that dreadful disease, yellow fever, that formerly made cemeteries of cities, should make every American proud. This great achievement will be an imperishable monument to civic improvement." Dr. Mayer said, "that the increase of crime in this country has been 13 times greater than that of the native born population" and "that this increase of crime is to be found in the tenement districts of the larger cities, where sunlight is a stranger and where there is nothing to cheer or relieve life of its gloom." He said that he wished "to emphasize the fact that the surroundings of man, or if you choose, the civic improvement by which we are surrounded, has much to do with the character of our lives, that we are more or less creatures of our environments."

He spoke also of the results of cleaning up certain unsanitary districts in some of the larger cities and in some of the larger countries, and said, that "in Germany, perhaps, more civic improvement has been done in connection with governmental authority than in any other country." He described the methods and results followed by certain German cities, especially Duseldorf, and deplored the disadvantages under which our civic bodies in this country were put, owing to the lack of of legal power which they possessed. He suggested the beautifying of the streets of Newberry, by planting of trees and by the parking of the city, and suggested certain definite improvements which might be followed in Newberry, and which suggestions might be followed out by other cities to equal advantage. His address was well written and is worthy of being read in full. This address would do good before any civic club and we hope will bring benefit to his native town as well as to other cities throughout the State. We congratulate Dr. Mayer on his excellent address.

CURRENT LITERATURE.

A Report on the Use of Antiformin for the Detection of Tubercle Bacilli in Sputum, Etc.

By Robt. C. Paterson, M. D., Journal of Medical Research, April, 1910.

Antiformin is the patented name of a disinfectant which was introduced in 1900, by Victor Tomell and Axel Sjoo of Stockholm, as a cleansing material for fermenting vats in breweries, but it is only since the investigations of Uhlenhuth and Xylander in the Kaiserliche Gesundheitsamt in Berlin, in 1908, that it has come into prominence in bacteriology and hygenic work. Its composition is simple: Namely, equal parts of liquor sodae chlorinatae (B. P.) and a 15 per cent. solution of caustic soda. Its efficiency as a germicide is in part due to its ability to dissolve and to render homogenous the various substances in which

bacteria are found. The tenacious thick masses so often found in sputum and which contain tubercle bacilli in their interior are broken up and dissolved by the antiformin, while the bacilli are not affected either as regards their morphology or their viability. The method commends itself by its simplicity, and with a little practice yields very constant and satisfactory results. Antiformin is useful for the examination of feces, urinary sediment, pus, and blood for tubercle bacilli.

Notes of an Interesting Case of Triplets.

By George Aldridge, L. M. S. S. A., London, Eng. The Lancet, June 11, 1910.

The retention of dead twin foetuses, until a third foetus had reached to nearly nine months' development, is, I think, sufficiently rare to warrant publication. On Whit-Monday I was called to attend a case of labour—a primipara, aged 28 years. On examination I found outside the vulva the foot and leg of a foetus. This I was able to deliver quickly and easily, and found it to be a male mummified foetus of about six months' development. On further examination I found a bag of membranes bulging at the os uteri and the head of the child presenting. The os being fully dilated I ruptured the membranes, and in about an hour delivered the patient of a living female child of about eight and one-half months' development. I then placed my hand upon the abdomen to express the placenta, and after working some time with no results, I again examined the patient. The uterus had contracted firmly, but I could feel through the os the foot protruding of another foetus. This was gripped by the contracted uterus, and the patient, altho uneasy, was having no pain. After waiting an hour, I examined again and found the os uteri dilating and the leg as well as a foot of a foetus presenting. Gentle traction seemed to bring no pains, and in about twenty minutes I had delivered the woman of another foetus, (male, mummified) of about four months' development. The placentae were removed with difficulty; the two male foetus were attached to one placenta, whilst the living female child had a separate one. This was apparently a case of two ova, one of them double.

Diagnosis in States of Depression.

By Bedford Pierce, M. D., F. R. C. P. The British Medical Journal, June 4, 1910.

Mental depression is so widespread and is due to such multifarious causes that any discussion of the subject, if not strictly limited in scope, would result in a treatise dealing with humanity in all its relations—in fact, a new and enlarged edition of Robt. Benton's Anatomy of Melancholy. The principal feature of the states of depression which I propose to consider is a mental anguish or pain out of proportion to any reasonable cause, and I necessarily exclude distress of mind arising in the ordinary course of human affairs.

When severe, mental depression is perhaps the most distressing of all human afflictions. In making a diagnosis most of us arrive at a conclusion by a process of exclusion—I therefore enumerate the most common disorders which may lead to mental depression, namely, alcoholism, general paralysis of the insane, psychasthenic states, dementia praecox and melancholia, divided into four groups: (1) confusional, (2) inhibitory, (3) intrinsic, (4) involitional. As our means of classification is imperfect, we find there are a number of cases which are not readily allocated. These fall into two classes: (1) Those due to recognized diseases, which need not be described separately, (2) the peculiar and irregular cases for which no place can be found. Almost every author subdivides melancholic states differently, and the want of unanimity is in itself evidence that the data for classification are insecure. The

varieties I suggest are (1) Confusional, (2) Inhibitory, (3) Intrinsic, (4) Involitional. The last group, which merits special mention, appears in the declining years of life, in woman after menopause, in men somewhat later. In the majority of cases no history of previous attacks. Few of us, in any degree familiar with the subject, will be able to say, "Nothing is so dainty-sweet as lovely melancholy."

Tanzi graphically describes in his Textbook of Mental Diseases the joy of recovery of melancholia. "If melancholia is the most painful of all diseases, its disappearance is the most delightful of all recoveries."

Skin Transplantation.

By John Staige Davis, M. D., Instructor at Johns Hopkins, Baltimore, Md. International Journal of Surgery, June, 1910.

Long years before skin grafting was attempted in Europe or America, certain individuals of the tile-makers caste in India obtained wonderful results in plastic operations. This was known as the Indian Method. It is interesting to note that plastic surgery was practiced in ancient Egypt and India. In 1597, Gaspar Tagliacozzi published in Venice the first systematic work on plastic surgery. His is called the Italian Method, in contradistinction to the Indian or Oriental method, and is the basis of the operation in use to-day. In 1886 Thiersch demonstrated his method which has revolutionized skin-grafting. The technic for the cutting of Thiersch grafts, etc., was published in the Annals of Surgery, September, 1909.

The method now used of exposing grafts to the open air has been quite satisfactory, and this method is much facilitated by the use of moulded wire cages. All sorts of dressings have been tried, but the most satisfactory and comfortable is sterile boracic acid ointment spread on rubber protective, held in place by strips of adhesive plaster, and over this are put dry sterile gauze dressings and a bandage.

The Importance of the Eugenic Movement and its Relation to Social Hygiene.

By Lewellys F. Barker, M. D. Journal of the A. M. A., June 18, 1910.

The science which has for its object the prevention of the birth of the unfit and undesirable, and the improvement of the race by furthering the productivity of the fit and the desirable by early marriages and by healthful rearing of children, has been called by Mr. Francis Galton, whose life has been devoted to a campaign in favor or it, the science of eugenics. This science assumes that it is possible to improve the race by the application of the newer knowledge which modern studies of heredity and environment have yielded.

Until recently young people approaching marriage have had no way of obtaining definite information concerning fit and unfit matings, and many of them have never been taught to consider whether or not a proposed marriage would lead to the birth of children with healthy bodies and sound and able minds. Students of heredity and hygiene are now making the effort to supply the much needed information.

One fact is outstanding, heredity is *not* a "mere bubble to be pricked" despite the cleverness of Mr. Shaw. Through our knowledge of its laws we shall be able to progress toward the better part of the ideal of Nietsche, who longed for the highest perfection of man. As a practical advisor for the attainment of this perfection, Nietsche may not have been wise, but no one could have had a higher aim.

"Hitherto all things have brought forth something better than themselves, are you going to be the ebb of this great tide? Man is something that is to be surpassed. Thou, the victorious one, the self-sub-

duer, the commander of thy senses, thou shalt build better than thyself. But thou must thyself be built square in body and soul. Thou shalt create a higher body . . . thou shalt create a creator."

The Question of Enucleation in Purulent Panophthalmitis.

By Robt. L. Randolph, M. D., Baltimore, Md. The Journal of the A. M. S., June 18, 1910.

According to Becker, forty-three cases of meningitis, after enucleation of the eye had been placed on record up to 1888. The first two of these were reported by Von Graefe, at the Heidelberg Ophthalmological Congress in 1863, and he took occasion to warn against enucleation when the eye was in the active stage of an acute purulent panophthalmitis. With the exception of the contributions of Andrews and Geo. C. Harlan, little or nothing on the subject has appeared in this country. It seems to me important that those who make a habit of enucleating eyes in the active stage of an acute purulent panophthalmitis should keep such patients for several days after operation under the closest observation, with special reference to temperature and symptoms generally suggestive of meningeal involvement. It is quite possible for a mild meningitis to exist for a short time without being detected. It has been my rule to watch the temperature of all patients after enucleation, and I think I can say offhand that no elevation followed. It would be interesting to get statistics of meningitis in those cases in which the eye had not been subjected to surgical interference.

BOOK REVIEWS.

Education in Sexual Physiology and Hygiene.

By Philip Zenner, M. D. The Robert Clarke Co., Pub., Cincinnati, Ohio.

Dr. Zenner's little book carries a message to the public, which meets, to some extent, the demand for an elemental discussion of the subject for the use of the growing mind. His first four chapters are necessarily elemental as they are intended merely as talks to young children, who could not appreciate a more complete discussion of the subject. They might easily be used as samples of talks to be given in primary schools in most communities, and might serve as texts for other subjects to be taken up in order. His talks to college boys are admirable; they are less brief and more explicit in many of their statements, and at the same time, do not present the subject in such a way as to stir up lascivious thoughts nor else cause undue fear. The book is brief and easily read within an hour, but its points bear much elaboration and much deep thought to absorb them all. We would recommend the reading of this book not only by the laymen for whom it was intended, but also by many physicians who hide from themselves their duty to the public in the matter of education. They must not forget that we are, as doctors, teachers of the public on all subjects pertaining to health and disease. The manner in which the book is written makes it easily read and absorbed.

PERSONAL NEWS.

Death of F. W. Dantzler, M. D.

Prominent Citizen of Holly Hill Died Yesterday.

"Holly Hill, June 16.—Special: Last night at his home just beyond town, Dr. F. W. Dantzler, one of the oldest and most prominent citizens of this section, breathed his last.

This ends a long and useful life, crowded with useful service to his family, his church and his country. He had been ill for several months, and no hope was entertained for his recovery, but for the last week or two he seemed a little stronger. Yesterday a change for the worse took place, and last night the strong spirit took its departure.

Throughout his long illness his pure and noble Christian faith sustained him and kept him brave and patient. He was in his 63d year, and leaves a family of several daughters and two sons, all of whom are showing forth the influence of this good father. His wife died several years ago. The funeral was held this afternoon."

MEMBERS OF THE SOUTH CAROLINA MEDICAL ASSOCIATION.

The following is a list of the members of the S. C. M. A., reported to the State Secretary's office up to April 5, 1910. If your name is not on it, and you are a member, consult your County Secretary.

HONORARY MEMBERS.

Dr. S. Baruch, New York, N. Y.
Dr. J. H. Musser, Philadelphia, Pa.
Dr. D. M. Prince, Laurinburg, N. C.
Dr. Jos. Price, Philadelphia, Pa.
Dr. H. O. Marcy, Boston, Mass.
Dr. Howard Kelley, Baltimore, Md.
Dr. C. U. Shepard, Summerville, S. C.
Dr. H. A. Hare, Philadelphia, Pa.
Dr. Wm. T. English, Pittsburg, Pa.
Dr. Geo. Ben Johnston, Richmond, Va.
Dr. James P. Tuttle, New York, N. Y.
Dr. John B. Deaver, Philadelphia, Pa.
Dr. C. H. Chetwood, New York, N. Y.
Dr. Richard C. Cabot, Boston, Mass.
Dr. J. M. T. Finney, Baltimore, Md.

ABBEVILLE COUNTY MEDICAL SOCIETY.

President, J. R. Bell; Vice-President, G. A. Neuffer; Secretary and Treasurer, C. C. Gambrell.
Delegate—W. D. Simpson.
Alternate—C. C. Gambrell.

1. J. A. Anderson, Autreville, S. C.
2. J. R. Bell, Due West, S. C.
3. B. H. Carlton, Donalds, S. C.
4. P. K. Black, Mt. Carmel, S. C.
5. C. C. Gambrell, Abbeville, S. C.
6. L. T. Hill, Abbeville, S. C.
7. J. C. Hill, Abbeville, S. C.
8. F. E. Harrison, Abbeville, S. C.
9. J. W. Keller, Abbeville, S. C.
10. D. S. Knox, Autreville, S. C.
11. G. A. Neuffer, Abbeville, S. C.
12. T. O. Kirkpatrick, Lowndesville, S. C.
13. J. V. Tate, Calhoun Falls, S. C.
14. J. W. Wideman, Due West, S. C.
15. J. D. Wilson, Lowndesville, S. C.
16. W. D. Simpson, Abbeville, S. C.
17. J. M. Carlton, Donalds, S. C.

AIKEN COUNTY MEDICAL SOCIETY.

President, W. A. Whitlock; Vice-President, H. H. Towne; Secretary and Treasurer, Harry H. Wyman.
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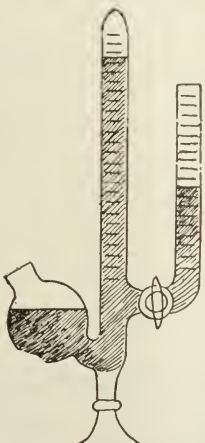
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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. J. C. SOSNOWSKI, Editor.

VOL. VI. AUGUST, 1910. No. 8

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

Business communications relating to subscriptions and advertising should be addressed to

JOURNAL S. C., MED. ASS'N., CHARLESTON, S. C.

THE PRESENT STATUS OF CANCER EDUCATION*

By Southgate Leigh, M. D., Norfolk, Va.

(Chairman of Committee on Cancer Education, Tri-State Medical Association of Virginia and the Carolinas.)

Mr. President and members of the South Carolina Medical Association: I feel deeply honored at being invited to attend the meeting of this distinguished society and at being requested to address you.

At the last meeting of the Tri-State Medical Association, the question of cancer education was considered as being one of so great importance that a committee was appointed to take the matter up actively with the various authorities and organizations of the three States and interest them in an active campaign for the education of the people against this dread disease.

As chairman of that committee, I am presenting the matter to you to-day more to ask your earnest co-operation in the good work than with any intention of discussing anything new or original. Indeed, what little I shall have to say will be really a brief review of what has already been presented to the profession by myself and by others much better qualified for the work.

There is no doubt that cancer is widely prevalent in this dear Southland of ours, and as far as we can learn, is steadily on the increase.

It claims at least half as many victims

*Read before the meeting of the South Carolina Medical Association at Laurens, S. C., April, 1910.

as tuberculosis, and is a more loathsome and horrible disease.

Cancer tissue is of a most peculiar character, having in itself no death dealing properties, but causing trouble by its power of "persistent and unlimited growth. It is normal tissue gone wild, running amuck," as one writer has most appropriately described it. It grows into surrounding parts and organs. When it once gets a good hold on a patient nothing can stop its progress.

And where does the profession stand in its knowledge and ability to combat this dreadful scourge? Scientists the world over, who are working for a specific cure for cancer, have as yet found none, and we are forced to admit that for advanced cancer there is no cure. But we know also that cancer in its early stages is always a local, curable affection, and that there is often a precancerous stage in which it can be prevented by appropriate treatment.

Cancer is then either preventable or curable in at least 95 per cent. of the cases.

Notwithstanding this statement, based on the highest authority, we are told in the report of the committee of the American Medical Association, that to-day cancer is killing more than 90 per cent. of those afflicted.

This is then a *real problem* that we of the medical profession have before us.

The public is in denser ignorance on this than on any other subject concerning its welfare. Innumerable obstacles are to be overcome and deeply rooted prejudices have to be gotten rid of.

The "dread of the knife" and the notion that operation increases the tendency to cancer are often heard. The heavy mortality which follows after operations for cancer is frequently mentioned by the layman and the "quack" alike.

The teachings of the advertising "cancer specialists" who prey upon the superstition of the people will be probably the hardest obstacles to overcome.

Even in the ranks of our own profession we have to admit that there is not as clear an understanding as there should be in regard to prophylaxis and importance of early and prompt treatment of cancer.

While preparing a paper to read before the Seaboard Medical Association in December of the past year, I sent one of my assistants to Washington to look through the files of the Army Library and was much disappointed to find that so little had been written on cancer education in this country. Recently I took the matter up with the secretary of the American Medical Association and have gotten a few later reprints. The following have discussed the subject to some extent:

Bryant, Echols, Crile, Taylor, Wainwright, Carstens, Frederick, Clark, Gellhorn and Park.

At the last meeting of the Tri-State, papers on cancer education were presented by Drs. Guerry and Harnsberger, and by myself. Dr. John G. Clark, of Philadelphia, who is chairman of the Board of Public Instruction of the A. M. A., writes me that he has recently had popular articles on cancer in three of the Pennsylvania secular papers.

With the exception of these last and of my own paper read before the public at the Seaboard Medical Association meeting, and published in full in two secular papers, I have been unable to find that any other steps have been taken in this country to bring this matter directly to the attention of the public. I am now communicating with the boards of health and medical societies of the various States to ascertain positively what has been done. I had hoped to receive replies in time for this meeting but was disappointed.

We can be certain, however, that in the United States but little attention has been paid to this most vital matter.

Dr. Winter, of Koenigsburg, Germany, in 1903 took the matter up in a most practical manner by distributing pamphlets to physicians and midwives of his

section of the country, urging their co-operation and insisting upon early examination and prompt diagnosis of suspicious cases. He also appealed to the women direct, through the newspapers and by circulars distributed through the public clinics.

The results of his campaign were most effective in bringing to his clinic a much larger proportion of cases in the earlier and curable stages of the disease.

It is just such practical, common sense efforts as these that we must make in our own States. Our work will have to be directed along several lines:

1st. The education of our own profession.

2nd. The personal instructing of our patients.

3rd. Educating against cancer quacks.

4th. Instructing the public through boards of health, both State and local.

5th. Instruction through public clinics and various societies.

The general practitioners, especially those who labor in the rural districts, will never receive other than words of commendation from me. Their work is the noblest of all, their burdens are the heaviest. Laboring day and night, they frequently have but little time for thorough examinations, especially in gynecological cases. And then again, so many of their patients fail to apply to them for relief in minor ailments. I have no doubt also that they frequently think that the surgeons are extreme in many of the views expressed at medical meetings and through the journals. This is a subject, however, about which we all must be extreme. We must have in the work the active and hearty co-operation of the family doctor. He it is who comes closest to the people; he is the one to do the real educating of the individuals in the great work that is before us.

Warts and moles and small tumors frequently become malignant. Every open sore is a menace if long standing. Ulcers of the lip should always be looked upon with suspicion and promptly treated or excised. Every lump in a woman's breast should be excised. "Eighty-five per cent. of such lumps are malignant, and of the remaining fifteen per cent. half will become so if the patient lives long enough." (Judd.) Long standing irritating conditions of the stomach, liver or intestines are liable to become cancerous. The most important of all conditions to be looked after are uterine. Women must be taught that leucorrhea is a sign of trouble, that profuse or irregular flow is abnormal; and that an examination is imperative if they are suffering with these or any other suspicious conditions. Many a woman neglects herself until too late, thinking that her profuse menstruation is due to "change of life." It is hard to make them understand that the menopause means a diminution in the flow.

These and many other similar matters should be kept constantly in mind by the general practitioner in looking after the safeguarding of his patients against cancer.

In prophylaxis probably the best field for good work is in erosions of the cervix following laceration at childbirth. From various causes, such as malnutrition, returning to work too early, lack of cleanliness, etc, a large proportion of cervices never heal and become a frequent cause of cancer. Nearly all of them may be cured by simple local treatment and douches.

That part of our campaign which is intended to enlighten the public against "cancer quacks" will have to be conducted most cautiously. The good work of "Collier's" and other fearless secular magazines is already bearing fruit, as is also the step taken by the A. M. A. in printing in pamphlet form several of these reports for general distribution. I would urge that each member of this

society keep in his waiting room copies of these pamphlets for the perusal of his patients.

In the "Rupert Wells Case" the Government chemist found that the preparation for internal use was a weak solution of quinine, and that for external use contained glycerine and water, and yet this man advertised extensively in the religious papers as being able to "cure cancer without the use of the knife." It was estimated that his income amounted to $70,000 a year! This concern and a number of others have been exposed and driven out of business. The A. M. A. circulars published also the following:

Dr. Curry Cancer Cure Company, Dr. Benj. F. Bye Sanitarium, Dr. L. T. Leach Sanatorium, Ohio Soluble Sulphur Company, Dr. and Mrs. Chambler & Company, Dr. Wm. O. Bye and the Toxo Absorbent Company.

The authorities are going after "quacks" of this class so vigorously that it is probable that they will all be put out of business.

We have still to cope with a class of "cancer cure fakes" who are doing even more harm in my opinion than the ones mentioned, and that is those who are treating cancer by plasters and other caustic remedies. Dr. Taylor, of Richmond, in the opening words of his address said: "In this city, and hardly beyond the sound of my voice, there exists an institution for the cure of cancer which was installed, and is presided over, by a man who, as far as I know, does not claim to be a doctor, and yet I am willing to venture the opinion that there are at this time under treatment in that institute more cases of cancer than are treated by any three surgeons in this audience." This same institution advertises extensively in the various religious and secular publications of Virginia, and states in these advertisements that it is "endorsed by the Legislature of Virginia —physicians treated free." Many a poor devil goes to such a place in the curable stage of cancer, and while under the "plaster treatment" precious time is lost and the disease becomes general and therefore incurable. The curing of a few very superficial skin cancers by this method helps to deceive the public.

Our State Board of Health should distribute literature on the subject of cancer similar to the excellent pamphlets already issued in Virginia and other States on typhoid and other diseases. Such literature could be put in the proper form for the public as well as the profession. The local boards of health could do more detail work along the same line and distribute circulars through the various free clinics and women's societies.

And finally each local medical organization should have a committee on publicity empowered to furnish the press with judicious information suitable for the public eye.

Dr. Carstens, of Detroit, in a recent paper entitled "What Women Should Know in Regard to Uterine Cancer," suggests to the Michigan Board of Health that they get up a circular as follows:

"To the Women of the Land—What They Should Know About the Early Recognition of Cancer.

"The change of life, or menopause, comes on gradually, rarely suddenly; it is not preceded by excessive flowing or discharge or pain in a healthy woman.

"The first symptoms of cancer are:

"1. Profuse flowing, even if only a day more than usual. Flowing or spotting during the interval, or after the use of syringe or the movement of the bowels.

"2. Whites, or leucorrhea, if not existing previously; if existing, but getting more profuse, watery, irritating or producing itching, it is a very suspicious symptom.

"3. Loss of weight, if no other cause is apparent; pain in the region of the womb, back or side.

"If any of the above symptoms occur

after the age of thirty-five or forty a woman should seek prompt relief and insist on a thorough investigation of the cause and prompt treatment.

"Cancer is always at first a local disease and can be removed if early recognized, and an absolute permanent cure brought about."

No more important or vital a matter than this could possibly claim our attention. Many of our people in all walks of life are being tortured by a dreadful disease and going to early graves through ignorance, pure and simple. If they had the knowledge that we have in regard to cancer they could practically all be saved. What a splendid opportunity our profession has for fruitful, life-saving work. Let us be up and doing. And while we must be cautious and tactful in this work of cancer education, we should let nothing stand in the way of its complete dissemination.

INFANTILE SCURVY.

A. W. Browning, M. D.

Mr. President—Gentlemen: It was not my purpose in selecting "Infantile Scurvy" as the subject of this short paper to advance anything new or not found in the standard textbooks, but to bring it to your attention with the sincere hope that while busily engaged in the treatment of the more common diseases of your various localities, if you have not done so in the past, you will always keep it in mind in your future practice, because a failure to recognize or make a proper diagnosis means a life of agony and a slow but sure death in the great majority of cases to the suffering little ones, while a proper diagnosis holds out to them a most favorable prognosis, with simple treatment.

Adult scurvy is an old disease, better known to physicians of unhygienic past centuries than to us at the present day. Infantile scurvy, on the contrary, has a literature which extends back in this country not more than twenty years. cases observed previous to this having been confounded with "purpura rheumatica," "rickets," etc. Again while adult scurvy was, in civilized nations, a disease chiefly confined to limited localities, where trouble might be expected along nutritional lines, infantile scurvy appears with great frequency among the wealthy and luxurious, as well as among the poor, and is not therefore limited to any region or community.

Yet its causative conditions are the same, too great sameness or limitation of diet, especially of manufactured "unfresh" food.

It occurs at times in every community where infants are artificially fed, and such feeding is perhaps more frequently found among the wealthy than among the toilers for daily bread. Breast milk, the complete infant food, the only food absolutely wholesome for babies, possesses certain qualities not always sufficiently appreciated by the physician. Among these are its "freshness" and its diversities of ingredient properties. Just what the "freshness" of new drawn milk consists in no one seems to know. It certainly exists and seems essential to the complete health of the suckling.

All textbooks state that the milk given by a cow or by a mother varies from day to day in its percentages; varies even during the course of the same nursing, the child drawing at one part of its meal milk richer in protieds, at another part milk richer in fats. In consequence the diet of a child at the breast must possess a certain degree of variation resembling those which give appetizing and

wholesome features to the mixed diet of adults.

My chief desire, as I have stated, being to call your attention to the importance of this disease, (six cases having come under my observation during the past three years that I remember distinctly, three of which had been treated by competent physicians, who failed entirely to recognize it,) to its frequency, the obscurity at times of the symptoms and the simplicity of the treatment. I will not dwell at length as it may be found fully treated in all textbooks on pediatics.

Fully developed cases are easy enough to diagnose if the physician has any acquaintance with such diseases among infants. Cases less pronounced are liable to puzzle even an expert. Some of the infants are plump, though their flesh lacks solidity and they may take their food eagerly. Anaemia, however, with evident malnutrition is the rule. The most pronounced symptoms may be diarrhoea or hemorrhage from a mucous surface, bowels, bladder, stomach or nose. If there are no teeth, scurvy symptoms may be absent from the mouth. The gums around the teeth are generally dark red, spongy, and bleed easily from pressure.

Among the commoner symptoms are painfulness on being handled, appearing after one or two months, swelling of lower extremities about the same time, generally commencing in one thigh and soon the other becomes similarly affected. Skin shiny and tense but seldom pitting and not characterized by much local heat. Ecchymosis spots over skin, and as Barlow describes: "There develops a sudden swelling of one brow, with puffiness and possibly slight staining of the upper lid, and soon the opposite becomes affected in same way." Many cases are erroneously diagnosed rheumatism, rickets, paralysis of lower limbs, etc., and treated aimlessly for indefinite periods as in a case confessed by a competent young surgeon, whose patient recovered after convalescence from his infected wound on orange juice and proper diet. Sometimes our old friend, the general label, "malarial disease," is given to them.

The treatment of infantile scurvy is extremely simple and the results very satisfactory if the child is not already moribund or has no grave complicating disease.

Orange juice given in teaspoonful doses or less once or more a day seems to have a direct curative effect. Other fresh fruit juices, if they agree, are likewise beneficial. All "dry" foods, whether condensed milks or other manufactured preparations, are at once to be discontinued and their place taken by egg water, fresh meat juices, from lean meat, which has been quickly heated just enough to kill possible parasites in it, and fresh cow's milk, containing the upper creamy part, and as little diluted as possible.

Appliances to rest the limbs, warm oil anointing, general tonics, fresh air and simple nerve sedatives to secure sleep, may aid in convalescence.

Elloree, S. C.

THE TREATMENT OF DISEASED TONSILS.*

By Charles W. Kollock, M. D., Charleston, S. C.

The treatment of diseased tonsils may be summed up in two words: Remove them. In order, however, to understand these words aright it is necessary to know what constitutes a diseased tonsil, how it may be recognized and when and how it should be removed. It is well to say just here that acutely inflamed tonsils from any cause will not be included under the head of diseased tonsils, because such attacks, when properly treated, are usually cured and the tonsils are left as healthy as before they were affected. One observer has said that tonsils are only present in the diseased or enlarged state, which is probably an exaggeration, but it is certainly true that a normal tonsil is never known by its presence.

An enlarged tonsil is not necessarily diseased in the ordinary acceptation of the term, it may simply be an hyperplasia, an overgrowth of the parenchyma, without disease of the crypts and follicles. This hypertrophied tonsil, as its name indicates, is larger, often many times larger, than the normal; it protrudes into the pharyngeal space, which it appears at times almost to occlude, its surface is smooth and not seamed by fissures or broken by cavities; it is not painful and causes little inconvenience or discomfort, except in those cases where it interferes with breathing and swallowing and by pressure on the mouths of the eustachian tubes causes deafness. The really diseased tonsil is readily recognized in many instances, while in others it is only by careful inspection and accompanying symptoms that its true condition is learned. The surfaces of these submerged tonsils may also be smooth, their fissures and crypts being concealed by the anterior pillars and triangular folds, but when drawn by forceps into view it is not difficult to recognize their true condition. These are the most dangerous types of diseased tonsils, because, from their inconspicuous situations and innocent appearances, they may be disregarded. They often contain pockets of pus or cheesy masses that are most dangerous sources of infection, while particles of food may also lodge and decompose in the crypts. The crypts frequently extend from the surface through the gland to the capsule, and not infrequently what appears to be a small surface opening leads to a large cavity filled with decomposing cheesy material of the foulest odor. From these openings the mass exudes from time to time. They may temporarily close and heal only to burst open again as the contents increase and approach the surface, and at such times the tonsils become very sore. Persons having such tonsils will tell you that by pressure the cheesy mass can be forced out and that the taste and odor are very disagreeable. Treatment, other than removal, is unsatisfactory, for unless the entire cavity can be cauterized or curetted a cure will not follow. To cauterize or to curettte the cavity thoroughly is not an easy task, unless it is laid wide open, and when it is remembered that there may be any number of these disease breeding places the advantage of absolute removal must appeal to all. Any other treatment simply means a loss of valuable time and leaving infected tissues a return of the trouble.

These tonsils are often the cause of the supra-peritonsillar abscess, and one abscess predisposes to another, for this space having once been infected will remain so until the source has been effectually removed. Peritonsillar abscesses

*Read before the meeting of the South Carolina Medical Association at Laurens, S. C., April, 1910.

cause not only the most intense suffering but so great at times is the swelling that swallowing is most difficult, speech cannot be understood, breathing is labored and the jaws are firmly set. A free and deep incision should be made above and slightly to the inner side of the anterior pillar and at right angles to the front of the mouth in order that the wound may gap and facilitate the emptying of the abscess. The greatest relief follows this operation. As soon as the acute inflammation has subsided the tonsil should be enucleated and the supratonsillar space thoroughly cleaned out, otherwise a recurrence of the abscess may be expected at a longer or shorter interval.

Tubercular infection may and does take place through the tonsils and the enlarged cervical glands, which are always found just below the angle of the jaw when tonsils are diseased, often contain the bacilli which, however, are not always found in the tonsils. Some authorities think that the removal of tuberculous tonsils causes the disease to spread more rapidly, and for that reason advise against it, but it would seem that the removal of such nests of disease must be a wise precaution.

Malignant growths are not very common and are rarely seen or recognized until the gland and surrounding parts have become involved. When such is the case any procedure short of absolute removal of all tissues involved is unjustifiable. It is only fair to state that not a few authorities do not advocate the removal of all diseased tonsils but prefer to try some form of local treatment before resorting to the operation. After reading the opinions of many men it would seem that absolute removal is the only treatment that can be relied upon to eradicate the diseased condition, while all other methods are but makeshifts, which cause postponement of what must eventually follow and are a needless, and perhaps criminal, exposure to serious consequences.

Having endeavored to explain what constitutes a diseased tonsil and how it should be dealt with, the operative treatment will be briefly discussed.

Until comparatively recent years tonsillotomy was the usual operation, though there is abundant proof that enucleation and tonsillectomy were practiced by the ancients. Tonsillotomy is performed by the various kinds of tonsillotomes, snares, scissors and knives. Suffice it to say that these operations do not remove the entire tonsil except, perhaps, the hypertrophied-pedunculated form, and even then not entirely. However, for this class only, which is chiefly troublesome for its size, tonsillotomy may be appropriate, but again I say that enucleation is safer. When the operation for diseased tonsils has been narrowed down to one it would seem that a few words would suffice to describe it, but enucleation is also performed in various ways by different operators.

Before describing the operation for enucleation the subject of anesthetics requires attention for a few moments for this operation takes more time to perform and, as it is claimed to be more thorough, greater care should be exercised in its performance. A general anesthetic should be used when the subjects are very young children and when there is any doubt that the patient can be controlled under a local anesthetic. Concerning the choice of the general anesthetic I shall have nothing further to say, except that I generally use chloroform. I think, however, that the choice of the anesthetist is of far greater importance than the anesthetic for this operation, and especially am I particular to have some one in whom I have implicit confidence. With older and manageable children local anesthesia may be employed, but even under the circumstances the general anesthetic is preferable. For adults most operators prefer local anesthesia, which can be satisfactorily produced by the mixture of cocain and adrenalin. Three parts of

a 10 per cent. solution of cocain to one part of adrenalin (1 to 1,000) makes a satisfactory solution of which two or three minims may be injected at several points around the tonsil, but not into its substance, as it would pass quickly through the crypts into the throat and do little good. After waiting five or six minutes the operation may begin. There is little bleeding and the pain is slight, though the discomfort, chiefly from gagging, is considerable. As soon as one tonsil has been removed the other side should be injected. When a general anesthetic is used the patient may lie prone with the head hanging over the edge of the table or on one side, as the operator may elect. One or two assistants, besides the anesthetist, enable the operator to work with greater ease and thoroughness. The usual position for the patient when the local anesthetic is used is to sit upright in front of the operator and to lie flat when the general anesthetic is employed, but there are a few who advise the sitting posture in all cases. There is a growing feeling of distrust among some as to the use of adrenalin on account, as they claim, of the increased likelihood of subsequent hemorrhage.

The Operation for Enucleation.

Some advise elaborate outfits of numerous instruments, (which usually bear their names,) others require but one or two, while some contend that the finger alone is sufficient for the operation. Some prefer to enucleate the gland in its capsule while others think it best to leave the capsule as a safeguard against infection of the tissues beyond. This is not a bad idea if one can be sure that all diseased tissue has been removed from the capsule, for it must be borne in mind that the crypts pass entirely through the gland to the capsule. When the capsule is to be left the tonsil is first loosened from its attachments by a knife or separator, then it is drawn well into view by forceps and snared or cut from its attachments with scissors or knife. After this a tonsil punch is used to remove the fragments that adhere to the capsule. It may be seen that even this is not a radical operation, as portions may be easily overlooked. When enucleation is done the tonsil is grasped by a vulsellum, or other forceps, and drawn well into view, the anterior and posterior pillars should be carefully separated from the gland and especial care exercised to remove it intact from the supratonsillar space, for unless this pocket is thoroughly cleared the operation is incomplete. Next with a dull separator it is freed from its attachments until near the base of the tongue, when it may be snipped off with scissors. Great care should be taken not to wound the pillars or the superior constrictor muscle as it has been noted that these accidents were frequently followed by hemorrhage. Bleeding also follows more frequently an incomplete removal of the gland as the vessels do not contract and close as well as when they are left entirely in muscular tissue, which is the case when enucleation has been performed. Hemorrhage, as is well known, is the feature of the operation which most operators dread, and this fear prevents many from performing the radical operation, though it is an established fact that hemorrhage more rarely follows the radical than the partial operation. The former requires more time and skill and is undoubtedly a greater tax on the nervous strength of the operator at first. When a general anesthetic is used an assistant is almost necessary, while the presence of a skilled nurse is greatly to be desired. Most operators advise that the operation shall be done in a hospital.

Bleeding, which is usually profuse when adrenalin has not been used, ceases soon after the removal of the gland, but while it continues the patient should be placed so that the blood will not flow into the stomach or air passages. If it continues, a mop, which has been dipped in tannic acid or peroxid of hydrogen,

should be pressed tightly into the tonsillar space. Should this not control it the bleeding point may be twisted by forceps, the tonsil clamp applied, or a ligature passed about the vessel. It is well to remember that hemorrhage may occur several hours or even days after the operation, and attendants should be warned of this danger. One case of mine bled until he fainted when the hemorrhage ceased, while another bled after three or four days had passed. Slight hemorrhage may be stopped by spraying with ice water, by the application of adrenalin or any styptic. Death has been caused by hemorrhage on several occasions, and one operator (Jackson) has been obliged to ligate the external carotid artery in six cases. The danger of bleeding is undoubtedly greater in adults than in children, and with the former in proportion to their ages.

Pain is more intense after tonsillectomy and adults may confidently expect to suffer considerably from three or four days to a week. Pain may be relieved by allowing small pieces of ice to melt in the mouth and by spraying the throat with ice water or any non-irritating solution. But little if any food should be taken on the day of the operation and should be cold milk, ice cream or any similar bland substance.

The health of persons who have suffered from diseased tonsils is almost invariably improved after their removal, and this is especially true of children who have also have adenoids. The latter, while not common in adults, are present oftener than is supposed and should always be looked for and removed if present.

There is some difference of opinion among operators as to the effect of the operation on the voice. Some declare that improvement always follows the operation, others that for a time the voice is affected but eventually recovers and may be better than before, while a few contend that the voice is irreparably injured or changed. One of my patients, upon whom I operated about a month ago, writes me that her throat is much better but that I have ruined her voice. Of course, sufficient time has not elapsed to be certain of this, and I hope to have a different report later. Even at the risk of injuring the voice many persons would be infinitely better off without their tonsils. Sore throats recover, foul breath disappears and rheumatic troubles which have long been associated with diseased tonsils, quickly get well after their removal.

"Gürich and Schichold have found suppuration in the tonsils almost a constant accompaniment of rheumatic affections. Gürich not only found the pus but by tonsillectomy succeeded in curing 98 out of 125 patients with articular rheumatism; the outcome is not known in 15 of the other cases. Schichold's experience has been equally decisive in a series of 70 cases; the pus was accumulated in actually measurable amounts in a number of individuals. An important point in these experiences is that in nearly every case the patients have never been aware of the tonsilitis and the discovery of pus was a surprise. The tonsils were apparently normal on casual inspection; not until the anterior pillars of the fauces were drawn aside was anything abnormal discovered, but then the pus exuded on the slightest pressure. The process in the tonsils these writers regard as responsible for the development of toxins that maintain the acute or chronic rheumatic pains. The only effectual treatment, they assert, is to remove the tonsil, leaving merely its flat base. The rapid and permanent subsidence of the pains confirms the etiologic connection of the follicular tonsillitis with the rheumatism. It is important at the same time to see that the teeth are put in good order. Schichold advises prompt tonsillectomy at the first attack of acute articular rheumatism. He has observed a number of instances in which an ap-

parently mild attack was followed by the graver forms of heart disease. The germs responsible for many cases of articular rheumatism nest in the tonsil pus and pass thence into the blood. Cauterization or slitting the tonsil does not clear out all the foci, but its removal puts an end to trouble from this source. Other diseases besides rheumatism may be amenable to the same treatment. Curschmann has been teaching for twenty years the connection between follicular tonsillitis and nephritis, the latter resulting probably from the action of toxins generated in the tonsils. He preaches that tonsillectomy is the logical treatment.

Discussion.

Dr. E. W. Carpenter, of Greenville:

I enjoyed the Doctor's paper. The last word has not been said on tonsils, and I hope you do not think that I am presuming to say the last word on tonsils. I understood the Doctor to say that he did not consider a tonsil enlarged from interstitial hyperplasia to be diseased. I would like to ask if that applies in kidneys.

One reason we remove tonsils is because of enlargement, the other reason is because of infection. Enlarged tonsils in children are always, in my opinion, diseased tonsils. We do not always see them while the disease is active, or in the acute inflammatory stage; but I believe that all enlarged tonsils in children are diseased tonsils. In adults enlarged tonsils may not be actively diseased. The disease may have disappeared and nature taken care of the infection, but enlarged tonsils, in as much as they have been enlarged, have been diseased.

The Doctor described beautifully the *complete* removal of tonsils in children. I must say that the literature teems with such beautiful descriptions. I have seen some men remove tonsils, but I have yet to see, in a very young child, a tonsil that I thought was absolutely removed, nothing remaining except perhaps the capsule. I think that it is impractical. It is the ideal thing to do, but it is impractical. If you give an anesthetic the bleeding is fierce, as a rule, requiring sometimes three assistants to keep the field clear, and after having enucleated one, you are very well satisfied to remove the other with a punch.

I have long since abandoned the guillotine. I think we should remove as much of the tonsil as practical. I have abandoned the guillotine as being inadequate. In children I think we can remove the tonsils with one of the many punches on the market. There are several.

Dr. Parker:

In the last two or three years, Mr. President, I think, largely owing to the fact that a great many of our colleagues have been going to Rochester, the absolute removal of the tonsils has been advocated again. It is claimed that this is impossible or not often accomplished with a tonsilotome, and a complete dissection of the tonsil is advised either with the finger nail or appropriate instruments.

There are few subjects upon which I think my own experience entitles me to express a positive opinion, but I have operated on some eight or nine thousand tonsils and I have seen a great many more operated on. I remember ten or fifteen years ago, in London, at the Golden Square Throat Hospital, among a staff of eight or ten physicians, there was only one practicing the method under discussion. Most of his cases had to be hospital cases, and were kept there several days, and sometimes five or six days after the operation. With those operating on the cases by other methods, the patient sat down for fifteen to twenty minutes in the outdoor department, walked out and never returned, or simply for inspection. I never adopted his method.

My objections to a complete enuclea-

tion by any method are in the *first* place, many tonsils are not encapsulated; they are stuck in there as adenoids are in the naso pharynx, and you cannot get them out completely.

Second. In a good many of them the attempt to get them out completely is often dangerous and very troublesome and makes a major operation of what ought to be a minor operation.

Third. In the class of cases permitting enucleation the presence of a small residue of tonsil tissue is rather beneficial than detrimental.

Dr. Carpenter here has said that he has relegated his tonsilotomes to the back woods. If they are worth anything and not rusty and dull, I would be very glad if he would send them down to me. I claim, and can demonstrate it to any one who wants to see it, that with a pair of forceps to pull out the tonsil, and with a good sharp tonsilotome adapted to the size of the tonsil, we can practically enucleate the gland completely enough through the guillotine, and with or without anesthetic the operation on both tonsil and adenoids can be done in two or three minutes with perfect satisfaction in the vast majority of cases. With the attempted complete enucleation with the finger-nail or other instruments, the operation is longer, more serious and of no greater value to the patient.

Dr. J. W. Jervey:

I have prepared a few remarks on the discussion of Dr. Kollock's paper, and I have done so for the purpose of being accurate and also because I am not a partcularly good extemporaneous speaker.

THE DISEASED TONSIL.*

By J. W. Jervey, M. D., Greenville, S. C.

What is a diseased tonsil?

With that simple query the bomb is hurled that splits the world of laryngology. From the ultra-radicalism, on the one hand, which declares that every tonsil that is visible on ordinary inspection of the throat should be forthwith enucleated, to the ultra-conservatism, on the other hand, that practices dilatory tactics and procrastination at the expense of the patient's health, usefulness, and even life itself, the whole gamut is run.

If there is one aphorism in laryngology that can be stated with the positiveness born of careful observation and logical deduction, it is that all tonsils are not bad tonsils.

The common appearance of highly complex tonsillar tissue occurs only in the highest types of animal development. Its noticeable presence occurs in the very large majority of persons. It is fair to assume, accepting Darwin's theory of the origin of species—and that is to-day universally accepted—that the development of the tonsils is a detail of highly civilized type variation which is becoming, if indeed it has not already become, a characteristic. If the presence of this development were detrimental; if the tonsils were the frightful bugaboo they are often pictured, they would long ago have disappeared with their owners under the law of survival, instead of appearing now in their most complex form almost universally in the highest types of human kind, as the sturdy guardians of the dangerously exposed introitus of the two great systems of digestion and respiration. I say "highest types of human kind" advisedly, and it is interesting to note, for perhaps it adds a little weight to the argument, that the embarrassing presence of tonsillar tissue on the negro, for instance, is not common, and I have

*Read before the meeting of the South Carolina Medical Association at Laurens, S. C., April, 1910.

never once seen it that I can recall in the pure black. It is occasionally seen in the mulatto, and oftener as the mixed type approaches nearer to the white stock. At all events, it has been shown [Packard] that the tonsil is not a vestigial remnant, for its presence has been demonstrated from its simplest form in the lowest of the vertebrates to its most complex form in man.

Systematic inspection of the throats of hundreds of school children convinces me that the noticeable presence of tonsillar tissue is normal, at least up to the age of puberty, and probably later. Furthermore, I have been unable to observe that there is any fixed, or even approximate, period of life at which tonsillar atrophy occurs—it may take place at any age according as artificial or natural influences may bear upon the condition.

In a very large number of cases the swollen tonsils are, in my opinion, purely a compensatory hypertrophy—a line of defence thrown out by Nature to protect the mouth-breather, taking up in a measure the functions of the nasal turbinals, and when proper nasal breathing is re-established, behold the hypertrophied tonsils shrivel and withdraw. These are essentially the lymphatic type of hypertrophy; but even the evidently fibrous type often exhibits an astonishing tendency to a shrinking disposition. Such compensation is not unique. It occurs variously in the human economy; and, indeed, all Nature is full of such automatic manifestations.

Another point which seems to have escaped the attention of my colleagues: Modern research has made us familiar with certain principles of immunization. We know that we are constantly exposed to the deposition of pathogenic bacteria upon the surfaces of the upper respiratory and alimentary tracts. We know that comparatively few of us develop systemic infection. Furthermore, we know that imprisoned colonies of these bacteria are very frequently, if not constantly, found in the tonsillar structure. In the light of our present knowledge it is then apparently certain that the absorption of toxins from the imprisoned colonies must effect a certain systemic immunization. There appears to be no alternative to the deduction. This theory is in no sense controverted, nor is its force weakened by the fact which we must all admit, viz., that there are times when, owing to weak resistance or an excessive amount or excessive virulence of the infection, the tonsillar barrier is broken down and the lymph structures are overwhelmed by the poison. Because the tonsil at times becomes inflamed and swollen in its fight against bacterial invasion is scant reason for its removal. Does not every other organ do the same? That is but proof of its beneficence. Only when it and its adjacent lymphatics fail promptly to control such an infection can its usefulness be considered at an end and its elimination become desirable. The structure of the tonsil is the same as that of any other lymphatic gland save that it originates, instead of merely transmitting, the lymphatic flow. Consider the analogy.

There are two theories extant regarding the possible tonsillar obstruction, one being that this tissue presents a mechanical barrier to the entrance of the bacterial entities; and the other that the bacteria are destroyed in the tonsil by some process of phagocytosis. Granting the partial truth of these theories, it must be admitted that they contain certain weaknesses, and I beg that you will note their essential difference from the theory of the tonsil as an agency for immunization which I offer for your serious consideration.

The hypertrophied tonsil oftentimes cannot be distinguished by the naked eye, or by palpation, as being of the fibrous or the lymphatic type. It may combine the features of both forms. The fibrous tonsil, as we know, is usually seen in the adult. Ten years ago, whenever I saw

one I urged operation. Not strangely, many adults decline operations upon themselves unless some immediate and dire danger is presenting. As a result, I have seen many and many a protruding member in the fauces of adults which had never caused, and in my best and sincerest present belief, never would cause, serious trouble of any sort—provided, as I have said before, that nasal breathing is free and unobstructed, the preservation of which latter function, it is my conviction, is the real crux of a very large proportion of this vastly important tonsil problem. In my modest experience the overwhelming majority, if not practically all, of the cases of recurrent quinsy which have come under my observation have been associated with the so-called submerged and ragged tonsils, or the roughly flat formations densely adherent to the pillars. These are the cases which merit prompt and thorough surgical attention, but on account of the difficulties involved, and with which we are familiar, these are also the cases in which too much careless and incomplete work is done upon the tonsils. And, *per contra*, on account of the comparative ease with which the firm protruding type is handled there is, I believe, entirely too much radical work done upon them.

That the tonsil is essentially an organ of protection, both mechanical and biochemical, seems reasonably certain. Many clinical evidences may be cited in support of it. Laying aside the disputed property of its epithelium in regard to physical resistance to bacterial absorption, the tonsil has another valuable mechanical protective power. Owing to its position and prominence in the throat it is the dragnet for sharp foreign bodies which, escaping from the tongue's control, begin a dangerous excursion into the alimentary or respiratory tract. The tonsils are by far the commonest lodging place of pins, needles, fish and chicken bones, bristles, splinters, etc., which have been "swallowed." This is no mean and insignificant function.

The physiological fight of the tonsillar structures against the invasion of acute infectious diseases such as measles, grippe, scarlatina and diphtheria is a matter of common observation with us all, and the almost universal presence of a plentiful endowment of tonsil tissue in the children of tuberculous parents surely cannot be a mere coincidence. Is not this rather Nature's effort to assist in the protection and immunization of the children living in an infected atmosphere? Neither is this view to be considered in the least antagonistic to the well-known fact that obstructive tonsils or adenoids offer a serious menace to the scarlatina or diphtheria patient.

It has been pointed out that in many instances where the cervical glands were removed, leaving the tonsils, in cases of tuberculous adenitis, pulmonary phthisis, rapidly developed, but that when the tonsils were also removed this occurred much less frequently. Naturally, if the tonsil is overwhelmed by the invasion and its resistance broken down, it becomes the atrium of infection; and when the lymphatics which support its physiological activity and aid in the effort to repel the invaders, are removed, there remains no glandular barrier between the seat of the original overpowering infection and the other bodily structures. This is no argument against the virtue of the tonsil, but is merely the evidence of operative thoughtlessness and stupidity. Such cases as these imperatively demand the removal of the tonsils, of course.

So, then, from the foregoing premises I am prepared to lay down the proposition that a moderately enlarged tonsil is not necessarily a diseased tonsil, but, on the contrary, it is probably a manifestation of active physiological effort [Dependent somewhat upon the size of the throat, I should say a "moderately enlarged tonsil" would be one that projects

approximately as much as one-fifth to one-fourth of the transverse distance between the perpendiculars of the two anterior faucial pillars—and that means a pretty good-sized organ.] And thus, while we have not solved, and cannot yet even hope to solve, the great problem of what clearly and unmistakably constitutes "the diseased tonsil," I plead for your support in this deductive argument that we consider this "moderately enlarged," non-inflammatory and very common type as at least one that is *not* "diseased."

Discussion.

Dr. S. C. Baker:

Mr. President, I do not think that too much stress can be laid upon the importance of having a skilled anesthetist during the removal of these tonsils. I have seen many tonsils removed under general anesthesia, with the patient lying on the back, and the patient would take the anesthetic very well indeed, until the jaw is widely opened and the mouth gag introduced. Operators usually use the mouth gag in doing the operation, and whether it is the pressure of the mouth gag or angle of the jaw upon the pneumogastric or what not, I have seen those patients suddenly turn blue, when the jaw is opened by the gag, the mouth gag would have to be removed, the tongue drawn out and efforts made to resuscitate, and it does not do for a tyro to attempt to give an anesthetic for the removal of a tonsil, especially where any time has to be consumed in the removal of it.

Dr. Kollock closes:

Mr. Chairman, I did not expect that these gentlemen who have discussed my paper would agree with what I have said about enucleation, and you will remember that I did not state that those were entirely my own views, but were the views of the majority of operators at the present time. After partial removal patients often go to some one else to have the operation completed.

As to the instruments spoken of, you may use the tonsilotome, which Dr. Parker uses; you may use the finger, as the Mayos do; you may use anything to get the diseased tissue out, and any one who leaves a bag of pus or cheesy masses does not do good surgery.

I do not know what Dr. Jervey was going to say in his discussion. I wish he could have finished reading it.

I said enlarged tonsils were not necessarily diseased tonsils, in the exact meaning of the term. I may have my finger enlarged from a blow; it is in a diseased condition; it isn't in a natural condition, but if it returns to its natural condition I do not consider it a diseased finger, and so with the tonsils. Where they do not have cheesy matter or pus in them, I do not consider them dangerous, because in time they may return to their normal condition, and many men, even those who operate and advise the enucleation of the tonsil, advise leaving those tonsils alone where they seem to be causing no harm.

I am very glad that the subject has been so thoroughly discussed and that all phases of it have been brought out, and I thank the gentlemen who took part in the discussion.

DIAGNOSIS OF FRACTURES OF VAULT AND BASE OF SKULL AND THE INDICATIONS FOR AND TECHNIQUE OF OPERATIVE TREATMENT*

By Clyde F. Ross, M. D., Anderson, S. C.

Of all the fractures, from two to four per cent. are fractures of the skull, really a larger per cent. than one would think, and yet when applied to the soldiers in battle about 50 per cent. of those injured are with some form of fracture of the skull. Sixty per cent. of cranial fractures occur between the ages of twenty and forty years, being about nine times as frequent in the male as in the female.

The diagnosis of fracture of the skull requires evidence of solution of continuity, which may be obtained directly in fracture of the vault and indirectly in fractures of the base. The more access we have to a fracture the easier the diagnosis, consequently the diagnosis is less difficult in compound than in simple fractures. In simple fracture of the vault, only palpation of the surface is of aid in discovering a fissure or depression when the deformity can be appreciated if it is of considerable depth and breadth; if it is of mild degree it is very often masked by the thickness of the soft parts. If the fracture be a mere fissure it may be recognized by the "cracked pot" sound. This is elicited by percussion, either with or without the stethoscope, and may be perceptible to either the physician, the patient or a bystander. The diagnosis of subcutaneous fractures can be made with more certainty when there is a depression or a displacement of the fragments, but no doubt the linear fractures in a vast majority are not recognized.

If a depression is evident there must be excluded, (1) old depressions or shrunken scars in the scalp; (2) senile atrophy of the skull; (3) syphilitic depressions; (4) natural prominences and irregularities due to peculiar cranial development.

The history of the case, absence of injury to soft parts, presence of an old scar over depression and various syphilitic manifestations are all of value in preventing error.

Contusions of the head resulting in subcutaneous hemorrhage are very frequently confused with depressed fractures, but in contusions the edges are elevated above the surface of the skull, they are curved, rounded and soft; whereas in fracture the edges are not usually raised above the surface of the skull, are irregular in outline, sharp and hard.

In compound fractures of the vault the sense of sight comes to the assistance of that of touch and a diagnosis is more easily made. Some difficulty is experienced even then in differentiating a hair line fracture from (1) adherent coagulated blood; (2) grooves for blood vessels, and (3) sutures, but the fact that the dark blood line cannot be wiped away as coagulated blood, the continuous oozing of blood or cerebro-spinal fluid and the non-tooth like character of the fracture, with a knowledge of the position of the sutures will materially aid us in reaching the right conclusion.

Fracture of the inner table alone can only be suspected, but marked violence followed by cerebral irritation or inflammation such as monospasm or monoplegia increase the possibility of such an

*Read before the Anderson County Medical Society, March 7, 1910.

injury. Generally speaking if the violence was localized we can rest assured the inner table is more severely injured than the outer.

Symptoms of fracture of the base of the skull are as indirect as those of the vault are direct, but a complete history, including the degree, manner and direction of the violence, the site of impact of the blow which produced the solution of continuity, with the following points will aid us: (1) The spreading of the hemorrhage from the site of fracture to certain locations under the skin or mucous membrane, where they appear as ecchymoses. (2) The flow of brain tissue, serous fluid or blood from the cavities adjoining the base. (3) Disturbance of the function of those nerves situated at the inferior surface.

(1) Ecchymoses occurring under the skin of the eyelids, connective tissue of the eye, mucosa of the pharynx, regions of the mastoid process, and sides of the neck are valuable signs of fracture of either of the three fossae of the skull *only when the injury occurred at some distant point,* and did not result from a contused wound in that region. Its late appearance owing to the fact that it takes some time to gravitate through the loose connective tissue at the base of the brain to the skin is a very important point.

Exophthalmos occurring immediately after violence followed by ecchymosis of the conjunctiva and eyelid is an undoubtable sign of fracture of the base of the skull.

The flow of brain substance and cerebro-spinal fluid from the eye, ear and nose is a positive sign of fracture in these regions. The serous discharge may begin at once, but is usually delayed for twenty-four hours; it is of considerable quantity, its flow is affected by the position of the head and expiratory efforts such as coughing or sneezing. At first it is bloody, but later it is clear, is alkaline in reaction, contains a small quantity of albumen, large amount of sodium chloride and frequently gives a positive reaction for sugar.

In dealing with hemorrhage from these cavities we must be sure to exclude all other possible sources. Hemorrhage from the ear due to fracture must be distinguished from that due to (1) simple bursting or laceration of the drum; (2) fracture of the anterior and posterior walls of the external auditory canal; (3) separation of the cartilagenous and bony portions of the auditory canal. This is very frequently hard to do, but long continued bleeding affected somewhat by the position of the head and expiratory efforts are very suggestive of fracture of the temporal bone. On the other hand there could be a fracture of this bone and no evidence of blood unless the ear drum is ruptured. In some exceptional cases bleeding does occur from the ear in fracture of the temporal bone when the drum is not ruptured, but they are very seldom, and of more interest theoretically than practically. If the blood is not discharged through the ear it very frequently discharges through the eustachian tube into the pharynx.

Disturbance in the function of the cranial nerves, especially the optic, facial and auditory, is caused by the line of fracture traversing the canal or foramen through which they have their exit and compressing, lacerating or dividing them.

In fracture (1) of the anterior fossae there will be one or all of these symptoms or signs (a) discharge of brain tissue, cerebro-spinal fluid or blood from the eye or nose; (b) ecchymosis of the conjunctiva or eyelid; (c) exapohthalmos. (2) In fracture of the middle fossae (a) these discharges from the ear or eustachian tube; (b) ecchymosis of the pharynx; (c) paralysis of the facial and auditory nerves. (3) In fracture of the posterior fossae (a) optic paralysis; (b) ecchymosis about the mastoid or in the neck.

The conservative treatment of fracture of the skull of the last century by

rest, antiphlogistics, sedatives, cold, watching, etc., has been replaced by bold and active interference, which modern aseptic precautions have made possible. There are two forms of danger from fracture. (1) The immediate danger to the brain followed by septic inflammation; (2) the late development of a continuous headache, epilepsy or insanity. These results, both immediate and late, have lead to the following indications for operation. In any fracture of the vault, simple or compound, accompanied by symptoms of intracranial mischief, the skull should be opened and the cerebral injury corrected. If there are no symptoms of intracranial lesions but a marked localized depression from which we would expect ill consequences in the future, we should trephine. In all cases of punctured fractures the absolute rule is to trephine, open the dura and disinfect. If, however, on the other hand there is a simple fracture with no decided depression and no cerebral symptoms the expectant plan may be pursued, but if the fracture is compound it must be carefully disinfected.

In a compound fracture where it is decided best not to trephine, the following course should be pursued. The entire head should be shaved. Ether should be used to remove the oily substance from the scalp then alcohol to remove the ether. After the alcohol a good scrubbing with soap and water. Alcohol again, finally bichloride 1-1,000.

All foreign bodies such as hair, sand, dirt and particles of bone should be removed with forceps, gauze or a solution of normal saline. If foreign bodies have gotten in the crevices of the bone, they should be chiseled out. Fragments of fascia, connective tissue and scalp should be removed with scissors. All bleeding should be completely stopped and the wound perfectly dry before closing it. Blood should not be allowed to collect in the pockets of the wound, to prevent which counter-openings should be made. It is very necessary that the fracture be covered with soft parts which may be accomplished by drawing together the edges of the wound. It may be necessary to separate the scalp from the skull for a distance to cause the edges to meet. If it cannot be accomplished in this manner a plastic operation by taking a neighboring flap will be necessary.

If the indications are such as to require craniotomy, either with the saw, chisel or trephine, infection must be thoroughly guarded against by aseptic treatment as recommended under compound scalp wound. The incision will depend to an extent upon the scalp wound, if there be one, but it should always be made at least one-half inch in diameter larger than the amount of bone to be removed. It should consist of skin, fascia, muscle, aponeurosis and periosteum, the outline should be oval or a "U" shape, with its convexity towards the crown of the head and its pedicle toward the base, giving the flap a good blood supply. Hemorrhage is controlled by artery clamps, followed by ligation. When much bleeding is anticipated the hemorrhage may be controlled by a constriction around the head. The whole flap, including periosteum, should be removed *"en masse"* from the bone and reflected. Then having succeeded in reaching the bone, if it be a comminuted fracture, the pieces of bone are removed by forceps or fingers; if necessary the opening is made larger with a chisel or trephine, the dura and brain are inspected. All blood clots should be removed, the bleeding points caught and ligated. Detached brain tissue as well as traumatised dura are removed. If on account of hemorrhage or any other cause it is deemed necessary to drain, but for which there should always be a positive indication, plain gauze, aseptic horse hair or catgut may be used. The dura is then closed with fine interrupted catgut sutures. The edges of the bone are made as smooth as possible and the flap returned after be-

ing sure of thorough hemostasis. The edges of the periosteum are sutured with interrupted catgut and the overlying structures with silk, silkworm gut or catgut. The wound is dressed with a large quantity of fluffed gauze and not redressed for one week, unless it becomes saturated with blood or other secretion or there is a decided rise of temperature.

In fractures of the base the danger arises not so much from the fracture itself as from the damage to the brain tissues, and if a fatal issue is the outcome it will most likely take place in the first twenty-four or forty-eight hours. Treatment consists in doing nothing or the following: Rendering the cavities (ear, eye, nose and throat) as aseptic as possible and promoting drainage. The ear should be cleaned of its wax, dirt, blood clot, etc., then washed out with bichloride 1-2,000 or hydrogen peroxide, followed by a loose packing of sublimate gauze. The orbital cavity should be treated the same way, and if it be a punctured wound carrying infection to the brain the tract should be enlarged and thoroughly disinfected. The mouth and nose should be washed in water as hot as can possibly be borne, followed by boric acid solution and frequently repeated. The nose should be packed lightly with gauze to filter the air and prevent infection to the anterior and posterior nares. In all basal fractures where there are symptoms of compression, Cushing's temporal intramuscular decompression should be performed.

REPORT OF A CASE OF APPENDICOSTOMY BY A METHOD DEVISED BY DR. PETTIJOHN, OF THE MARINE HOSPITAL SERVICE.*

By F. A. Griffith, Columbia, S. C.

My apology for reading a paper before this Association on the report of a case is that, to my mind, the operation as done is adaptable to practically all cases when an appendicostomy or a caecostomy is indicated.

Dr. Joseph Pettijohn's paper, "A New Method of Appendicostomy," appears in the Journal of the American Medical Association, March 12th, 1910.

Having a patient on whom I expected to do an appendicostomy, and being struck with the good features in the operation, I did this operation by Dr. Pettijohn's method, March 24th, 1910.

History:—Mrs. W., age 33 years. Multipara—no abortions—no serious illness until about one year ago, when she became ill with dysentery, many of the movements being involuntary, containing blood and some mucous; abdomen being painful and tender.

The patient was admitted to the Columbia Hospital, January 18th, 1910, with the symptoms given above, also a complete tear of the perineum and bilateral tear of the cervi uteri. The patient's temperature ranged from sub-normal to 101 1/5 degrees; tongue red.

At the request of Dr. S. B. Fishburn, I, on February 7th, repaired these old injuries and they healed without any complications. She had a sore on the head which she said was caused by a fall. I think this sore in reality is a broken down gumma. The bowel trouble was treated without any benefit. Syphilitic treatment caused the sore to commence healing.

Repeated microscopic examinations, by Dr. F. A. Coward, of feces, were negative as to the cause of the dysentery. The perineal repair benefited the involuntary movements but slightly.

*Read before the South Carolina State Medical Association meeting in Laurens, S. C., April, 1910.

Description of Operation:—In justice to Dr. Pettijohn I will give his description of the operation and his claim of its advantages in his own words.

"Mode of Operation:—An incision of three inches in length is made, directed downward, parallel with the fibers of the rectus muscle and about three-fourths of an inch internal to its outer border, beginning at a point half an inch below the level of the umbilicus. The superficial structures over the rectus muscles are divided in the same line, thoroughly exposing the rectus and retracting it towards the median line, after which incision is made into the abdomen through the tissues posterior. The fingers are introduced to determine the point of origin of the appendix. Over this point a vertical stab wound is made through the abdominal wall, using a small, straight bistoury one-fourth of an inch wide. While making this incision the intestines must be protected by a thick pad of gauze held on the inner surface of the abdominal wall at the proper place. In case the meso-appendix is too short or too narrow to permit the appendix to be drawn out of the abdomen, it should be clipped on the free edge at a point well toward its termination in order not to interfere with the blood supply of that portion of it which is to form the canal. A pair of narrow forceps is thrust through the stab incision, grasping the appendix and drawing it out until the intestine is in contact with the abdominal wall, after which it is held in place with several interrupted sutures at the opening in the skin. The large wound is closed with three layers of sutures and sealed with collodion or tincture of benzion. The appendix is then removed at a point one-fourth of an inch beyond the skin and a catheter inserted into the canal at once in order to keep it patent. Considerable swelling in its walls always occurs, and it is much easier to open the appendix and introduce the catheter immediately than to wait.

Advantages:—

1. This method is much cleaner than the operation of sewing the appendix in the large wound, for this can be sutured completely and sealed, leaving no port of entry for infection and rendering it possible to do a thoroughly aseptic operation.

2. The necessary irrigation with quinine solution can be be begun at once. The appendix is in close contact with the tissues in its exit and the wound is very small, so that the peritoneal surface unites with these tissues almost immediately and it is not necessary to wait for complete union.

3. This operation completely removes the possible danger of secondary hernia following an operation in which the appendix is sewed in a large abdominal wound. The appendix emerges from the abdominal cavity by an opening too small to admit of such a possibility.

4. In the operation as done ordinarily it is impracticable in many cases to make the incision over the exact site of the origin of the appendix, because there is much individual variation in different cases, and it is extremely hard to determine its exact location. In such cases this point may be at some little distance from the line of the wound, resulting in a tortuous canal or one perhaps requiring considerable stretching of the appendix to bring it to the surface. Such a result is most reprehensible and may cut off the blood supply with the resultant sloughing of the appendix. In the new method the stab wound is made directly over its origin, after examination, and results in a short, straight canal, opening directly into the bowel.

5. The secondary operation for the repair of the sinus after the patient has recovered under treatment is much simpler than in former methods.

Only a very small amount of scar tissue is formed in such a wound and the appendix can be easily dissected out and removed."

In my case the stab wound was made with an English-shaped scalpel, and the anterior or skin portion made a little larger.

The appendix was filled with fecal concretions and semi-solid fecal matter; the meso-appendix was ligated to the base of tthe appendix.

Irrigation of the colon with normal salt solution was commenced before she left the operating table and the colon has been irrigated night and morning with from two to three quarts normal salt solution from the day of operation until now.

To my mind this operation has all of the good points of a caecostomy or an appendicostomy as heretofore done, without their bad features.

I do not attach much importance to the sloughing of the appendiceal stump, as should it slough from deficient blood supply, you have lost nothing, as you still have your catheter in the caecum and the abdominal cavity is walled off at once if the caecum is pulled up against the abdominal wall with the base of the appendix in the posterior portion of the stab wound and the catgut anchoring suture passed through the serous and muscular coats of the base of the appendix. Should the surgeon deem it necessary he could irritate the caecum around the base of the appendix.

In my case the stump did slough, and when it sloughed the caecum dropped lower in the abdomen, which I think is preferable as it lies in a more natural position, and the danger of bowel obstruction is removed. My catheter came out, and when I replaced it I used safety pins passed through skin and catheter. I shall hereafter use the safety pins.

The use of the appendix in this case was only temporary, and yet made it possible to begin irrigation the day of the operation and left the appendix completely removed.

The patient is improving rapidly, and I think that we can safely predict an early cure—no blood in the movements since April 4th to April 19th. Movements less in number; no involuntaries since April 14th. She occasionally runs a little temperature, but is getting nearer normal as the dysenteric symptoms disappear. She has had a fast pulse throughout, probably due to general debility.

Is on regular diet, plenty of it, digests it, tongue looks normal. General appearance much improved. Has taken only Blaud's Mass for anemia, and mercurial inunctions since the appendicostomy.

Discussion.

Dr. S. C. Baker:

Mr. President, the technique described in the paper just read is certainly a very clever one, to say the least, and this operation is one that can be used in a great many instances. It is an operation that can be very easily performed if we know exactly what class of cases it is applicable to.

I want to ask the Doctor if he has looked up the cases sufficiently to know whether it is applicable to membranous colitis as well as mucous colitis? I happen to have a case of membranous colitis and would like to try it on it if I can be assured it is the proper treatment.

Dr. J. Shelton Horsley:

My experience with those matters is quite limited, because I do not suppose we have as many cases of dysentery in Richmond as you have here, but it seems to me that while the case Dr. Griffith has reported is very interesting, and the technique well described, cecostomy has an advantage that appendicostomy does not present. The chief advantage, it seems to me, is the location of the ceacum, being in proximity, in many cases, to the anterior abdominal wall.

The appendix, as we know, has no definite location, but it is more frequently than otherwise found behind the ceacum, and in order to bring it up, as Dr. Reid has pointed out, it is necessary to turn over the caecum, which makes a kink or valve and interferes with drainage. It seems to me that we are too likely to look upon the appendix as something that has to be made some use of, besides securing the surgeon a fee, and it would probably be a little more preferable to take off the appendix in those cases and treat the stump simply; tie a string around it, without a purse-string suture, which cuts off the blood supply and complicates matters unnecessarily. Let the caecum fall back and bring up the anterior wall of the caecum, stick a hole in it, put a purse-string suture around the hole, place in a rubber tube, tie the purse-string and we have a drainage which is very much better and more direct.

Dr. Griffith closes:

In the Civil Hospital in Manila last June and July three cases were cured. These cases had not been cured in a medical way, so he did this operation successfully three times for amoebic dysentery, and as to mucous colitis I do not see why it could not be used just as well for this form of dysentery as any other method of appendicostomy.

EDITORIAL.

EATING AND DRINKING.

A step in the direction of sane sanitary government has been taken by several urban districts in South Carolina within the past few years, by the establishment of meat and milk inspection within their borders. This is only a short step toward what we hope will follow in time—the regulation of the public health by properly trained experts—but though short, it works a decided advance; and heralds, we hope, a general awakening to the importance of enforced sanitary laws. The statement that "an army marches on its belly" might be extended to the whole of humanity, for the State, and indeed the world, equally truly advances on its belly, and has done so from the time the first alimentary tube evolved. With the advancement of the human race, there has grown a great carelessness in some lines as to the material we cumber our stomaches with, while we have paid more attention to titillating our taste than to being respectful of our insides. As a result we find a large increase in the morbid conditions resulting from such carelessness, especially in arterial changes, and have begun to sit up and take notice.

At present, we are striking only at the more immediate and spectacular results of bad dietary by our laws. We are trying to remove the dangers of chemical and bacterial poisons, we are moving to eliminate botulism and tuberculosis, and typhoid fever, and a few other such showy terrors, but as yet we are not attacking the main body of the enemy. This now is merely the preliminary reconnoitre or skirmish, and the real battle is to be joined later when we have won this—the battle for the betterment of life. The establishment of abattoirs, meat and milk inspectors, pure food laws, etc., are most commendable, but more than that do we want education as to sane living methods—to eat simple foods—enough, but not too much, to drink good water rather than poor whiskey, to be temperate in work as in diet, to be clean in mind, body and estate. The abattoir stands for clean meat, inspection for clean milk, but these are only two items. The church and the home should stand for clean living. But what so far stands for temperance in eating and temperance in work? We venture to say that more men die daily from intemperance in eating and in work than die monthly, or even yearly, from intemperance in drinking. And yet what voice is raised in protest against these things?

VACATIONS.

No matter in what field of endeavor man or animals labor, rest is essential. The mule plowing daily must be finally turned out to pasture to recuperate; the dog hunted daily must be given a rest, but the man working harder than either of these drives himself until the final collapse comes. This is especially true of men doing brain work, for here their hours are longer and the strain is more continuous;—even after their working hours—their brains are driven when rest is essential and the result is disastrous. As a razor used daily gets in such condition finally that it will not hold an edge, but laid aside for a few weeks regains its temper, so the human mind becomes dulled with overwork and sharpened with rest. This essential to good work is more especially overlooked by physicians than by any other class of men, and tends to shorten our lives more than we ordinarily realize. We often insist on our patients taking a vacation, while we much more often need one ourselves.

Vacations need not consist of trips to

some health resort or to some country place—the essential is change and removal from acquired ruts. The country practitioner derives benefit from a vacation spent in a city with its complete inversion of his ordinary life; the city physician needs the quiet of the country, and both need to forget all of their profession for a time. Nor does this of necessity mean idleness—for recreation and occupation during a holiday mean the only way of forgetting one's work. Some interesting and congenial occupation does more to rest one than an enforced idleness, and at the same time gives results which remain afterwards as a pleasant reminder of vacation days. To some the study of botany, or of zoology, or of music, or of art gives relief from the strain of work; to others, hunting and fishing; to still others, travel soothes the tired brain; but to all comes the need of change. Too much depends on our keeping our brains clear and well balanced and our bodies strong and healthy for us to neglect our needed rest. And we do not wish to wait till—

"Earth's last picture is painted,
And the tubes are twisted and dried,
When the oldest master has faded
And the youngest critic has died."

before

"We shall rest—and faith, we shall need it,
Lie down an aeon or two
Till the Master of all good workmen
Shall set us a task anew."

We need our vacation before that time.

ANOTHER INTEMPERANCE.

As to intemperance in eating:—This may be of three sorts—improper quantity, improper quality and improper methods of eating. Many of us eat too much or too little. As machines, we need the right quantity of fuel to go on. In time of stress, we frequently have to forego our meals and use the stored up materials of our bodies. This means that we are not only sapping our strength but also weakening our resisting powers and so laying ourselves open to the attacks of disease. We are burning our bulkheads to gain a little time, and generally when there is no necessity for our so doing. As a result, when we do get a chance to eat, we either are too tired to have an appetite or else eat too much at one time. More food than is necessary, especially proteid food, means more work on the absorptive surfaces, more work on the blood vessels and organs of metabolism, and more work on the excretory organs. The result—increased arterial tension, and as a further result, arterio-sclerosis, cerebral hemorrhages and nephritis.

Much, too, might be said of the results of improper quality of food ingested. The physician or layman mentally and physically tired is apt to pander to his taste more than to his needs. If he likes meat, he is apt to eat it in excess of the necessary quantity and neglect the vegetable side of his diet. If he, on the other hand, likes starches and sugars, there is a strong temptation to eat only these, and so the necessary balance is not kept up. We need all of the essentials of foodstuffs in proper proportions if we desire to save our organs as much work as possible, and should eat rationally. Here again the various metabolic disorders result in course of time from neglect of proper dietary.

The most disastrous results, however, come from improper methods of eating—more than from either wrong quantity or wrong quality of foodstuffs; for here no matter what is eaten, the result is the same—food is bolted partly masticated or too hot or too cold, or the brain is kept at work during the period of digestion, thus depleting the stomach and intestines of their quota of blood. Our troubles are taken to meals with us and we grow careless as to our eating, and so

the tale goes on. As a result, we find imperfect secretion by digestive glands, imperfect digestion, then putrefaction and the absorption of its products—absorption of imperfectly metabolized products and consequently, unnecessary labor on the part of the metabolic organs, with elimination of poisonous waste products—and again the same vicious circle of digestive, arterial and nervous changes. It makes no difference whether the cause be errors in quantity, in quality, or in method of eating, in any event, the result is the same.

WHEN IS MAN AT HIS PRIME?

About on a par with the famous question of "How old is Ann?" is the one forming the caption above. And yet for the past several months the lay press has been full of variations of this theme. The question there asked was: "Can Jeffries come back?" But in its wider application it was really the question whether any athlete, once over-developed and then idle for a considerable period of time, could regain his former ability. The individual question in this case was answered at Reno on July 4th, but the broader one is still being bandied about with much argument on either side. We do not attempt to answer it categorically here; but merely to call attention to a few points bearing on the discussion, which points seem to have been ignored by most of the men arguing the question.

These points are:

First:—Under the present intensive system of training for any athletic event, an enormous amount of muscular tissue is developed which is used only in the exercises taken for their development and in the event itself. This development is not only in the lines of increasing the volume of the muscle fibres present, as well as their quality, but also in the actual increase in the number of muscle fibres.

Second:—With the complete disuse of any organ or muscle of the body there comes an atrophy of that part and a consequent change into fibrous tissue of many of the elements formerly constituting that part; hence when over-developed muscles are not kept in constant use, a certain amount of degeneration is bound to result and fibrous tissue will take the place of the muscle fibres. This fibrous tissue is not capable of regeneration into muscle fibre and consequently impedes the muscular tissue remaining. Of course, this requres a period of idleness extended long enough to allow this fibrous degeneration to occur.

Third:—As stated above, fibrous tissue is not capable of regeneration into muscular tissue. These bands and masses of fibrous tissue contract and impede the remaining muscular fibres. The ones left have already had their powers of fission and rejuvenescence overtaxed by previous stimulation and consequently are not capable of their former increase. And what is the result? The muscles might seem to regain their former size, but not their former resiliency. They are sluggish and inelastic; their youth has gone. The fault lies not so much in the individual as in the system of over training in vogue.

Fourth:—There are exceptions to all rules, and as some men are young at ninety and others old at twenty, so some men may be able without keeping up their training to avoid at the same time the degenerative changes usually resulting from sudden cessation of exercise. Still it is a safe guess that the vast majority of over-trained men will have to pay the penalty, after any long period of idleness, of finding that they cannot "come back." A man may keep his youth for many years, but once gone he cannot turn the hands of the clock back and recreate himself. He may stand still but he cannot walk backwards.

As to the question "When is a man at his prime?"—the only answer possible reminds one of the famous definition of

"biliousness"—which was defined as "that condition existing when an individual is bilious." With equal lucidity we say that a man is at his prime when he is physically at his best, and have to let it go at that. We can draw no lines of time, or age, or development, for no two men are just alike. One man may be at his prime at twenty-five and another at fifty. We might as well speculate as to Ann's age again.

ATHLETES AND ATHLETICS.

When we come to the question of the present methods of athletic ttraining, however, we feel that we can express a more definite opinion and almost unreservedly condem the harmful plan of intensive training now in vogue. We are following the same general trend in athletics that we, as a nation, have been following with regard to our national resources. We are calling the rapid using up of our energies with immediate, wonderful results—"development," and forgetting the years to come; when conservation now would enable us to enjoy comfort later on. We are forgetting that the aim of our athletics is to provide sane bodies for sane minds and to prepare these bodies for the struggle of future years. Instead of doing this we burn up our reserve forces for immediate applause and forget or ignore the long vista of years through which we have to struggle. We believe in athletics and in physical development, but not in over-development. A foot race or a boat race won now does not pay for a dilated heart and enforced idleness twenty or thirty years later.

Again—we plead for temperance, not total abstinence, in all lines—this time in athletics.

SOCIETY REPORTS.

Abbeville, no report, 3d month.
Anderson, no report, 5th month.
Aiken, no report.
Bamberg, no report, 5th month.
Barnwell, no report, no society.
Beaufort, no report, 5th month.
Charleston.
Cherokee, no report.
Chester, no report, 5th month.
Clarendon, no report, 5th month.
Colleton, no report, 4th month.
Darlington, no report, 5th month.
Dorchester, no report, 5th month.
Edgefield, no report, 5th month.
Fairfield, no report, 5th month.
Florence, no report, 5th month.
Georgetown, no report.
Greenwood, no report, 5th month.
Hampton, no report, 5th month.
Horry, no report, 5th month.
Kershaw, no report, 5th month.
Laurens, no report, 5th month.
Lee, no report, 5th month.
Lexington, no report.
Marion, no report.
Marlboro, no report, 5th month.
Newberry, no report.
Oconee.
Orangeburg-Calhoun, no report, 5th month.
Pickens.
Columbia, Richland Co., no report.
Saluda, no report, 5th month.
Spartanburg.
Sumter, no report 5th month.
Union, no report, 5th month.
Williamsburg, no report, 5th month.
York, no report.

THIRD DISTRICT MEETING.

August 14, 1910.

Dr. J. W. Sosnowski,
Charleston, S. C.

Dear Doctor: The next meeting of the Third District Medical Association will be held at Clinton, S. C., Thursday, September 8, 1910.

The programme will be mailed to each member.

All physicians in the State are invited to be present.

I will thank you to get this in this month's Journal.

Will be more than glad to have you with us.

Yours fraternally,
G. A. Neuffer, *President.*

CHARLESTON.

At the mid-monthly meeting of the Medical Society of Charleston, S. C., Dr. J. Austin Ball read a paper upon anterior poliomyelitis, which was particularly interesting because of the present prevalence of that disease along the Atlantic coast, and because about twenty cases were reported in this city last month. The paper elicited much favorable discussion. Dr. Sosnowski at the same meeting introduced the discussion of vaccination and the period at which it should be repeated, reading extracts from the health laws. The matter was brought up by a communication from the public school commissioners requesting the opinion of the Society. While this was a scientific meeting at which communications are not ordinarily considered, because of the importance of the subject, the Society voted upon the matter, expressing the following opinion as a general rule:

Resolved, That it is the sense of this Society that every school child should be vaccinated and that this should be repeated every five years, and in case of epidemic, all school children should be immediately revaccinated.

The following clipping from the Philadelphia Press shows the extent of anterior poliomyelitis along the coast and that it is prevalent enough to excite comment among the lay press.

"Philadelphia, July 31, 1910.—Three new cases and one death were yesterday's developments in the disease-wave of infantile paralysis, which has been sweeping over the eastern part of the State.

The death and two of the three new cases occurred at Bethlehem. The third addition to the list of baby victims was made in Schuylkill County, where an epidemic of the paralysis broke out only two or three days ago, according to Dr. Samuel G. Dixon, head of the State Department of Health, who was in the city yesterday.

To be in a better position to combat the disease, Dr. Dixon has ordered that physicians all over the State must report every case of infantile paralysis to the proper health authorities, in the same manner that they report contagious and infectious diseases. It is expected that the data which this system will cause to be collected will be invaluable in the present exhaustive study of the disease which the State and city officials are making.

Cases Here but No Epidemic.

As the use of vaccine for tetanus has been considerably discussed here, the enclosed clipping is submitted:

(Special Dispatch to "The Press.")

Harrisburg, Pa., July 23.—State Health Commissioner Dixon's department furnished tetanus antitoxin for the treatment of twenty-nine indigent patients who were injured by explosive wounds incident upon the Fourth of July celebration.

The clinical reports received from the physicians using the State tetanus antitoxin up to date show that not one of these patients developed tetanus. The department feels, therefore, that the plan of distributing the antitoxin was well worth the money outlay.

There are sixty-seven stations at which the tetanus antitoxin can be secured. Out of this number eighteen stations were called upon to furnish antitoxin. Following is a list of these eighteen points and the number of packages distributed:

York, 1; Lock Haven, 4; Williamsport, 2; Tyrone, 1; Greensburg, 4; Reading, 2; Easton, 4; Mahanoy City, 1; Pottsville, 2; Johnstown, 4; Greenville, 1; Clearfield, 1; Warren, 1; Wellsboro, 4; Altoona, 3; Wilkes-Barre, 4; Towanda, 4; Beaver, 1."

The practice of the community extending the use of these prophylactics

free is a most excellent one. The city of Charleston is now establishing a Pasteur Institute and has recently decided to distribute diphtheritic antitoxin free to the poor, and it would be well to consider the necessity of adding to the list the anti-tetanus vaccine.

CYRIL O'DRISCOLL, M. D.,
Sec'y.

The following was received from the Columbia Medical Society:

THE COLUMBIA MEDICAL SOCIETY,
COUNCIL CHAMBER, CITY HALL,
COLUMBIA, S. C.

Officers—President, Samuel E. Harmon, M. D.; vice-president, Robert A. Lancaster, M. D.; secretary, Mary R. Baker, M. D.

PROGRAMME.

Monday, July 11, 1910, 9 P. M.

"A Theologic Diagnosis and an Osteopathic Treatment," by the Rev. C. A. Freed.

Report of Clinical Cases—"Abdominal Abscess Due to Foreign Body," Dr. A. B. Knowlton.

Report of Voluntary Cases—Papers: "Experiences With Sick Splint With Cases," Dr. Geo. H. Bunch.

"The Consideration and Treatment of Gunshot Wounds of the Abdomen," Dr. LeGrand Guerry.

Voluntary Papers.

Business.

Adjournment.

PICKENS.

The Pickens County Medical Society met August 3d, 1910.

The president, Dr. W. M. Sheldon, in the chair.

In the absence of the secretary, Dr. R. J. Gilliland, Dr. H. E. Russell acted as secretary *pro. tem.*

The members present were: Drs. Valley, C. N. Wyatt, Garret, Fripp, Woodruff, Allgood, Allgood.

Miss Julia Oldfield, trained nurse, was a guest at the meeting.

Dr. Woodruff presented a most interesting clinic—a very pronounced case of pellagra. The case was freely discussed and the remedial measures generally suggested were strychnine, arsenic and iron.

Drs. Garret, Woodruff and Gilliland will read papers next meeting.

Adjourned.

OCONEE.

WESTMINSTER, S. C., July 12, 1910.

The Oconee County Medical Society held its regular quarterly meeting at Westminster, S. C., July 12, 1910.

The meeting was called to order by the president, Dr. W. R. Doyle, at 1.30 P. M. Minutes of last meeting were read and adopted.

The subject for the afternoon was "Typhoid Fever." Upon this subject a well prepared and interesting paper was read by Dr. J. S. Stribling, of Seneca. Dr. Stribling dealt with the symptoms and pathology. Dr. W. A. Strickland, of Westminster, also read a paper on the "Cause and Prevention of Typhoid." The subject was freely discussed by the different members of the Society. It seemed to be the prevailing opinion that, with the proper observance of antisepsis and cleanliness on the part of the nurses in typhoid cases and guarding against flies and contaminated water, the disease could be practically stamped out.

A good report of the Hookworm Conference, held in Atlanta, was given by Drs. E. C. Doyle and C. M. Walker. The Society as a whole seemed to be very much interested in this important subject.

Dr. E. A. Hines gave an interesting report of the meeting of the American Medical Association, held in St. Louis a short time ago. Dr. Hines was a member of the House of Delegates and got

right into the inside workings of the organization. Dr. Hines was right much impressed with the smoothness and machine-like workings of the body. He will give our State Journal a complete report of this meeting later on.

Our Society received into its membership at this meeting Dr. E. W. Smith, of Newry, S. C. We are making a special effort to get all the Doctors in the county into our Society as soon as they are graduated and have passed the State Board.

The last meeting of our Society was not very largely attended, but those present manifested plenty of interest in the work, and upon the whole we had a very successful meeting.

W. A. Strickland,
Sec'y.

SPARTANBURG.

The Spartanburg County Medical Society held its regular monthly meeting on July 29th, 1910. As Dr. Gantt was out of the city Dr. W. G. Sexton acted as secretary. The attendance at this meeting was less than at any other meeting this year. Those present being Drs. A. R. Fike, S. T. D. Lancaster, J. J. Lindsay, W. H. Chapman, W. B. Lancaster, W. W. Boyd, H. R. Black, D. Lesesne Smith, W. A. Smith and W. G. Sexton. Those who were absent unfortunately missed quite a treat given by two visitors in the form of a most interesting and valuable paper on "Dental Inspection of Public School Children—the Need of Education of the Masses Along Dental Lines," by J. P. McCreary, D. D. S., and a delightful talk by Dr. Edgar A. Hines on the proceedings of the A. M. A. meeting at St. Louis.

Miss Neely James, the nurse employed by the Anti-Tuberculosis League, was present by request and was introduced to the Society.

CURRENT MEDICAL LITERATURE.

Dermatology As a Specialty, and Its Relation To Internal Medicine.

BY GROVER W. WENDE, M. D.

(The Journal of the A. M. A., July 2, 1910.)

It is surprising to note the crude notions still prevalent among the laity and even physicians regarding skin affections. How much harm and needless suffering result from these false views. How many innocent persons are cruelly subjected to unjust suspicions of moral guilt, due to ignorance of the real nature of their skin affections.

The idea that skin lesions are manifestations of "impurities of the blood" and require "medicine for the blood" is too deep rooted in the ignorance and prejudice derived from past teaching to be readily overcome. Thus the uric acid diathesis theory of skin affections is nothing but a modern setting of the older views. With the passing of uric acid as a cause of every conceivable ill to which flesh and skin are heir, we shall presently, probably have other variations of the old dogma to contend with. That there may be an element of truth underlying these crude notions we may readily believe, for metabolism lies at the foundation of all vital processes and errors of metabolism may be presumed to account for many of the variations from normal in the different tissues and functions of the body.

The relationship of the functions of the skin to those of internal organs are beginning to be fairly well comprehended, although many of the most important bearings are still poorly understood. The general practitioner must be far better trained in dermatology in order to comprehend and justly to estimate

the relations of dermatology to general medicine. Among the diseases especially calling for co-operation between dermatologists and internists are: Exudative erythemas, syphilis, leprosy, pellagra, diabetes, punctate telangiectases, eczema and psoriasis, parasitic skin diseases and eruptive fevers. This list could be extended almost indefinitely. A much closer professional relation should exist between the dermatologist and the general practitioner for the good of both and of the patient.

THE JEFFRIES-JOHNSON ENCOUNTER.

(From New York Med. Journal, July 9, 1910.)

The prize fight which took place in Reno last Monday, between a white man and a negro, is probably of interest to many people on various accounts which do not concern the medical profession and upon which, therefore, we do not feel called upon to remark. There is one aspect of the matter, however, which may be held to have a bearing upon anthropometry, for presumably there are persons who will infer from Johnson's triumph that the negro race is physically superior to the whites.

Such an inference, we think, would be erroneous, though we are well aware of the occasional superb muscular development of negroes. We are inclined to think that, as a rule, the blacks are not so muscular as the whites. Besides that, muscular development is not the sole index of physical vigor and apparently not even the most important one. Athletic men are not generally among those who are most likely to reach advanced age; indeed, they seem to be rather lacking in the power to resist disease, and, in particular, it is not very uncommon for a prize fighter to die of tuberculosis disease at a comparatively early age.

Not only are athletic persons apt to be defective in the vital power that in the long run tends to prolong life, but the negro, irrespective of his muscular development, falls a comparatively easy victim to an attack of infectious disease. There are, it is true, remarkable instances of longevity among the blacks, but it is noticeable that in general they are prone to fall into decrepitude when they reach middle age, and it is almost proverbial that the aged negro is a totterer. It is the common impression, one which we suppose to be well founded, that our negro population, if not actually diminishing, fails to increase in any such rate as the whites. To be sure, they are not so reinforced by immigration as the whites are, but this fact does not seem sufficient to account for their failure to keep pace with the white population in numbers.

The Jeffries-Johnson fight, then, cannot stand as a proof of the general physical superiority of the negro, and it could not so stand even if Jeffries' evident deterioration had not apparently been such a prominent element in bringing about his defeat. It would be unprofitable to speculate upon the probable outcome of the encounter if Jeffries had preserved or regained his former dash, for such contests between individuals cannot be accepted as settling any such question as that of the physical superiority of one race to another.

TREATMENT OF WOUNDS OF THE HEART.

By Walter C. G. Kirchner, M. D.

(Annals of Surgery, July, 1910.)

Wounds of the heart have for many ages been considered fatal, and it was not until recent years that the surgery of this organ has been attempted. The first surgical operation on the human heart was performed by Farina, of

Rome, in 1896, and since this time the heart has come to be regarded as an organ amenable to surgical procedure just as the other organs of the body. Among the first in America to suture the heart was Dr. H. L. Nietert at the St. Louis Hospital. Of five cases reported on three made successful recoveries. In most cases the operation is complicated by pneumonia and the respiratory function is greatly impaired. If a general anaesthetic is to be used, ether will be found safer than chloroform, and usually but little anesthesia is used after the chest has been opened. The cases are at times so desperate that while under observation or at operation the heart stops beating. When the heart has been arrested for a very short period and other signs of life have apparently disappeared, the heart has been encouraged to resume its contractions by gentle compression and massage of the organ. In wounds of the heart the pericardium often plays an interesting and important part. Hemopericardium with heart tamponade is a serious complication and demands prompt drainage of the pericardial sac. In treating injuries to the heart, the surgeon should have in mind a definite plan of attack, and the kind of flap to be used in approaching the heart should be determined by the nature of the wound in the chest.

GALL-STONES DURING PREGNANCY AND THE PUERPERIUM.

BY REUBEN PETERSON, M. D.

SURGERY, GYNAECOLOGY AND OBSTETRICS, CHICAGO.

(American Gynecological Society Number, July, 1910.)

Considering the frequency with which gall-stones are met with in women, it is rather surprising to find so few cases recorded in the literature where this complication has given rise to symptoms during pregnancy or the puerperium. In the pregnancy cases it is significant that in nearly one-third of the patients the onset of the attack is at the period of gestation when the uterus is approaching the level of the umbilicus, when as an abdominal organ it is beginning to crowd the intestines toward or upon the bile passages. If 11 per cent. of all women have gall-stones a certain proportion, as far as their biliary passages are concerned, may be said to be in a state of unstable equilibrium. Such women will be subject to attacks about the fifth or sixth months of gestation, when the growing foetus is beginning to hamper the eliminative powers of the liver. This tendency is enhanced by the injudicious use of the corset in the attempt to conceal the size of the abdomen and the increase in the sedentary habits of the patient.

In the puerperium it is to be noted that in half the cases the attacks occurred during the first seven days postpartum. This may be explained by traumatism to the biliary passages during labor, to the great eliminative processes going on at this period, to the change in intra-abdominal pressure, and finally, to the enforced rest in bed with its attendant constipation. In the puerperium the diagnosis of gall-stones may be even more difficult and confusing, since the chills, fever and abdominal pain at once suggest septic infection. The diagnosis of cholelithiasis during pregnancy and the puerperium will not be difficult in typical cases, if the possibility of the complication be borne in mind. Much reliance can be placed upon the jaundice, which seems to be more prevalent in pregnant than in non-pregnant women with gall-stones.

TONSIL RESEARCH.

By Richard B. Faulkner, M. D.

(Medical Record, July 9, 1910.)

George Crocker's legacy to Columbia University of nearly two million dollars for the sole purpose of research investigation into the cause and prevention of cancer, indicates a deplorable absence of knowledge upon this subject. And there are other fields in which the want of knowledge is equally deplorable, and in which there is urgent need for research light. The nose, mouth and throat need the light of physiological research. An increasing mass of literature pertains to the tonsils alone; permeated by conjecture, contradiction and confusion. Physiologists know nothing of the faucial tonsils. Faucial tonsils of healthy structure are constantly removed by laryngectomists. It is presumption to call all enlarged tonsils diseased. Without regard to function there is a growing habit of removing all tonsils, normal and abnormal—even in babies.

To offer tonsillectomy as a succedaneum for every tonsil affection, and for many pathological disturbances of the pharynx, larynx, and ears as well, is not in keeping with the spirit of scientific research. Tonsil diseases are not fatal. But many die from tonsil operations. Tonsillectomy is always dangerous. Some surgeons consider removal of the tonsil more dangerous than the removal of the appendix. Among the accidents which follow this operation are death from hemorrhage from the tonsil and also from the internal carotid; injury and laceration of the palatoglossus, palatopharyngeus and superior constrictor muscles, severe infection of the wound, etc.

The faucial tonsils are peculiar organs. They possess an anatomical character different from other tonsils, and from other lymphatic tissues. They are innocent organs, with functions chiefly confused by medical literature. The faucial tonsil is a natural organ and should not be removed any more than any other organ. Medical and philogical research regarding the faucial tonsils is badly needed.

PHARMACOLOGIC FETISHISMS.

By Wilfred M. Barton, M. D.

(Journal of A. M. A., July 23, 1910.)

Lead and Opium Wash in Sprains—Opium is entirely devoid of any peripheral effects when applied to the unbroken skin and is of no service whatever as a local anesthetic, when applied to the skin or mucous membranes. The same is true of lead, which is one of the least corrosive but one of the most astringent of the heavy metals. Applied to the skin, however, the salts of lead are devoid of action, because the precipitation of proteids is prevented by the intervention of the epithelium. The application of hot water is so simple, so cheap and so unspectacular that it does not appeal strongly to the imagination.

Spartein as a Cardiac Tonic and Substitute for Digitalis—Spartein is a liquid alkaloid found in common broom plant, along with a neutral substance, scoparin. Its advocates can say, with truth, that like digitalis, it slows the heart; the rythm of the heart is slowed and its contractions rendered weaker by it—a very strange action for a heart stimulant. While spartein slows the heart, it does so by depressing its ganglia. Digitalis, on the contrary, slows the heart by vagus stimulation. Spartien is therefore of no value in heart disease and is no substitute for digitalis.

Nitrohydrochloric Acid in Diseases of the Liver, and Jaundice—As a matter of

fact, dilute hydrochloric acid can have only a simple acid function in the alimentary canal and can be absorbed only after its neutralization. A small amount of chlorin, however, is present in the acid, and it is not inconceivable that this may have some effect on the liver, but no proof of any such action really exists. One fact concerning the treatment of liver diseases by dilute nitrohydrochloric acid, which incidentally arrests the attention, is that some authorities advise its use as an external application over the liver or in a bath, or even a foot-bath. If the acid works as well in a foot-bath as it does internally perhaps it would work as well in the bottle as out of it.

Physiologic Salt Solution as a Heart Stimulant—Do not rise in immediate rebellion at this. I do not mean to say that normal salt solution is of no value, but simply that it is not a heart stimulant. It has been shown that the introduction of large amounts of physiologic salt solution is not an entirely innocuous process. The blood becomes much diluted, then highly concentrated, and a considerable amount of hemoglobin is set free in the plasma, and these effects may last a week. The remedial effects of the treatment have been denied by some. The effects of the solution on the heart have been shown to be mechanical and exerted only after hemorrhage; therefore the application of this treatment to heart failure is irrational. Even in hemorrhage the amount given should be carefully guarded. A good rule is not to give more than 250 cc at a time.

Calomel As a Cholagogue—The idea that calomel acts as a cholagogue is as classic among physicians as the idea that Franciscus Sylvius described and named the Sylvan fissure, but neither is entitled to credence. Our professor of anatomy, Dr. Baker, showed the Sylvius notion to be wrong and pharmacologic observations have demonstrated the former to be equally fallacious. The beautiful blue Danube of Strauss is in reality a very muddy stream, and the green stools of calomel are only an accidental circumstance. Calomel behaves as a purgative by acting as an irritant on the intestine, owing to its partial solution and the affinity of the mercury ion for the epithelium. The stools are often of a greenish color, owing to the fact that the bile present in the intestine is hurried through the bowel and prevented from being converted into brown fecal pigment by the antiseptic power of the mercury, which prevents the growth of micro-organisms upon which the conversion usually depends. But the secretion of bile by the liver is absolutely unaffected, as has been repeatedly demonstrated in animals and in man, in cases of biliary fistula. The liver does not seem to be at all affected by calomel and the removal of the so-called bilious symptoms is a result of the purgation and the antisepsis.

Sweet Spirits of Niter As a Diuretic and Diaphoretic—How ruthless is the hand of time. It seems almost sacrilege to destroy this pretty little harmless delusion. But if it must be done, let it be done briefly. Spiritus aetheris nitrosi, or so-called sweet spirits of niter, contains some alcohol, ether and aldehyd and a slight trace of ethyl nitrite, the last when freshly prepared. The fresh, undiluted solution has a slight nitrite action. But when it is diluted with water and administered, the nitrite escapes and the only effect left is that of a very small amount of ether and alcohol, which is negligible. It does not affect the kidneys or the sweat glands; consequently it is neither a diuretic nor a diaphoretic.

The Pepsin-Pancreatin Diastase Fetish—The administration of these ferments in the treatment of dyspepsias is

like carrying coals to Newcastle—entirely superfluous. The digestive ferments disappear from the alimentary canal only after death, and even then only some time after, so that the occasion never arises when they are seriously needed. There is no harm in them, however, so that, as long as we need psychic playthings in pharmacotheraphy, they may be of use for that purpose.

Some other pharmacologic fetishisms are as well worthy of consideration as the above, which have been described. It is unfortunate, perhaps, that he who contends for the strictly rational use of drugs earns for himself the derogatory title of a therapeutic nihilist, but though I "deny the allegation and defy the allegator" in this respect, I must exclaim in the strain of Patrick Henry: "If this be nihilism, make the most of it."

FRANCOIS RABELAIS, M. D., REFORMER AND BUFFOON.

By W. B. Konkle, M. D.

(From N. Y. M. J., July 9, 1910.)

The buffoon saved the reformer, and the reformer immortalized the buffoon—is not that the core and key of the Rabelais riddle? At any rate, thus we will take our chance at the enigma of this Theban sphinx that for well-nigh unto four centuries has kept her rock by the highway of literature; while never comes the Oedipus at whose full answer she would cast herself down. But our interpretation is not new—it has been tried and retried; so that we have no hope of proving an Oedipus. Rather will our effort aim to be more than anything else, a doctor's tribute to one of the world's greatest names, which at the same time essentially and peculiarly belongs to medicine. And what a war has been waged around our Rabelais—marvelous Rabelais! Few have taken middle ground in the contention about this mysterious monk. Rabelais was a monk under pressure, and a physician by choice. He was a physician through and through. Hanack says St. Luke reveals himself as a physician by the style, phraseology and color of his writings. By the same tokens Rabelais, the physician, may be known. You see and hear and taste and smell and *feel* medicine page after page and chapter after chapter throughout his monumental work. Two brief passages may give an idea of the substance and flavor of our author. How wise, how scientific, how modern is this! "Good doctors employ at the proper time such methods in the prevention of disease and in the preservation of health that they have small need of the therapeutic and curative agency of mendicaments."

How human the interest, how shrewd the humor in this! The vital and eternal question of fee is up between a patient and a doctor. Remarks the latter: "From bad people I never take anything. I never refuse anything from good people. I am entirely at your command." Says the patient: "If I pay." Replies the doctor: "That is understood." As elsewhere, so in the medical sphere Rabelais maintained an attitude of caution, of vigilance, of independence; and the example and lesson of this attitude constitute, perhaps, his greatest contribution to medicine. Nowadays doctors are "Thomases," who must thrust their own fingers into the wound ere they will believe. Elerslie Wallace was wont to say again and again to his class: "Don't believe anything you hear, and only half you see." Rabelais taught them to be open minded but not pliant minded. In 1543 at the great hospital of Lyons, to which he was physician, he gave a public course in anatomy upon the *cadaver*, thus anticipating the career of Vesalius.

Getting back to Rabelais, the man, it

may be noted that he was a great thinker. His scholarship gave to his view the range of the world and of the ages. Rabelais was deeper than Luther and broader than Calvin. He was purely and coldly intellectual. As a writer, too, was Rabelais great. He did for his native tongue what Bunyan did for English. He is the maker of a universal classic.

Rabelais was loyal to duty. He was the devoted alleviator of suffering. He was gentle, sympathetic, benevolent in his intercourse with the common people. He gave away most of his livelihood. His will is richly Rabelaisian: "I have nothing of value; I owe much; I give the rest to the poor." He lived out practical Christianity and he died Christian.

CERTIFIED MILK COMMISSIONS.

By O. P. Geier, M. D.

(Illinois Medical Journal, July, 1910.)

All over this great country of ours we are hearing the cry for pure milk. The secular press has been devoting much space to this subject. Medical journals are presenting it in its various phases, until I am sure you all feel that there can be absolutely nothing left to be said on this subject. Municipalities are bending every energy towards this problem of a clean milk supply. Statistics of mortality compiled by boards of health, health officers and Government experts show that death pursues infants and children when they have been partaking of milk contaminated by dirt, the germs of infectious diseases, diphtheria, scarlet fever, etc. It is claimed that one-third of all infants die during the first three years of their lives and that eighty-five per cent. of these deaths occur among the bottle-fed infants. For any city to attain an ideal milk supply, the consumer as well as the producer must do his part. Public sentiment must be aroused as to the dangers of an impure milk supply. Within the past three years medical commissions have been started in some forty-six cities, totaling sixty-eight in all. Once established each milk commission should become a potent factor in the community. The history of any well organized medical milk commission is that of careful study of the local milk problem by the leading physicians of a community. I will pause long enough to state that it is not the purpose of the medical milk commission to attempt to supersede the municipal machinery employed to look after the general milk supply. A board of health has its legitimate functions and the medical commission its own special objects. The board of health attempts to secure good milk and the enforcements of ordinances which prohibit the sale of unclean milk. The medical commission furnishes a milk which in its purity is so far above the requirements of the law that it is not under the law at all. This ideal milk is secured by voluntary co-operation between physicians and dairymen and the enforcement of surgical cleanliness throughout the process of milking.

The greatest menace to the pure milk movement lies in the fact that politically controlled boards of health are pretending to guard public health. Wherever this condition obtains, there would naturally be friction between the milk commission, striving honestly and fearlessly to improve local conditions, and the board of health, on the other hand, which may be protecting special interests and individuals. In such instances the organized medical profession represented by the commission can so definitely mould public opinion that the pure milk movement in a city may become a campaign issue.

(Gulf States Medical Journal, Tropical Disease Number.)

Dr. William C. Gorgas, of Ancon, Panama, delivered a most instructive

and interesting address at the St. Louis meeting, June 11, 1910, on "The Expenses Necessary for Sanitation in the Tropics." He says: I am an optimist as to what will be the local results of building the canal at Panama. I expect this canal to turn out to be one of the greatest commercial successes that man has ever brought about. During the year 1909 we had on an average 8,386 white Americans connected with the commission. Among these we had a death rate from disease of 4.05 per thousand. The death rate from a similar cause in a population such as New York City or Providence, R. I., would be about 15 per thousand. A death rate from disease for a whole year among 8,000 Americans living at Panama, of 4 per thousand, demonstrates a sanitary revolution and shows what can be done in the tropics by special care and special effort, with a population entirely unacclimated. The death rate for the whole population on the zone at Panama for the year was 18.19 per thousand. The same rate for Providence, R. I., for 1908 was 16.76 per thousand. I believe I have shown that the Caucasian native of the United States is at present living in large numbers in the most unhealthy locality in the tropics doing the same out of door labor that he did at home. But the object lesson will do little good unless at the same time we can show that the expense of such sanitation is within reasonable limits. Taking the fiscal year for 1908 and 1909, we find that one-fourth of our expenditures were for sanitation. Three hundred and thirty-eight thousand and one hundred and seventy-eight dollars represents the annual appropriation for sanitation. Considering our average population for the past five years as one hundred thousand, we have the per capita appropriation for sanitation during the same period as $3.38 per capita per year, or 28 cents per month. When we consider the great changes for the better that have been accomplished by the expenditure, I think that we will all agree that it has been very economically accomplished. Such expenditure is certainly well within the means of any tropical community. The medical and hospital care of our employees and their families has cost us 2½ cents per day per capita. And their sanitation 9 mills per day. We therefore believe sanitary work on the Isthmus will demonstrate to the world that the white man can live and work in any part of the tropics and maintain good health and that the settling of the tropics by the Caucasian will date from the completion of the Panama canal.

Among the original articles in the Illinois Medical Journal for July is one on "Cancer" by George W. Crile, M. D., of Cleveland, Ohio. We quote from the above journal as follows: Cancer occurs widely throughout the entire animal kingdom, in the herbivora and the carnivora, in birds and in fish, quite regardless of habit or mode of living. Its incidence and growth obeys the law of no known infection; its actual increase in frequency is still unproven; rare cases undergo spontaneous retrogression; in experimental cancers, at least, such retrogression is accompanied by an immunity; the immunity in sarcoma in dogs, at least, is in the blood and may be used to cure other cases in dogs; in man this principle has not yet been established; no curative power of any drug or serum has proven effective for human cancer. X-ray and radium may kill superficial parts of the body where observations may be accurately made; at least in most cancers, there is a pre-cancer stage, the most common form being chronic irritation, chronic ulcer, scar, warts, moles, benign tumors, keratosis, etc. Such cases should be decancerized. Preventable or curable cancer should not be watched, it should be prevented or cured.

LABORATORY DIAGNOSIS—ITS IMPORTANCE TO THE PRACTITIONER.

By Francis Carter Wood, M. D.

(The Ohio State Med. Journal, July 15.)

It is evident that much of our accumulated scientific knowledge of disease must be regarded as merely a preliminary basis for the future work of investigators in medicine, and that this century is to see the expansion, synthesis and *practical application* of the scientific facts discovered, or about to be discovered, to the direct healing of the sick. For this reason there is now a strong call for the laboratory investigator to turn from abstract problems and to concern himself with the immediate needs in hand; the cure of the sick. It has occurred to me that the members of this section may be interested in some of the conclusions forced upon me by contact with this movement in medicine, a movement which threatens to put every physician into a laboratory and to make every laboratory man, if possible, a practicing physician. The question arises, however, how is a busy practitioner to obtain the benefits of laboratory knowledge. It has seemed to me the only ways in which the practitioner can obtain accurate and satisfactory reports from laboratory tests is not to attempt to do them himself, but either to adopt the old preceptor system, using a graduate in medicine instead of an undergraduate. The scheme of a central laboratory is perhaps more economical because one man can then do the laboratory work of six or eight practitioners.

Even if the physician may not be blamed if he is indifferent to laboratory methods from the point of view of diagnosis, he cannot with impunity treat those suffering from bacterial diseases without definite knowledge of the infective organism, so that all the newer antitoxic methods, such as those employed for the meningococcus and the vaccine methods introduced by Wright, require an absolutely accurate identification of the inciting organism before injection of the patient with these most powerful and dangerous drugs. I think that in the future the general practice of medicine of this country will be improved only by a closer union between the laboratory man and the practitioner.

THE OWEN BILL FOR CREATING A NATIONAL DEPARTMENT OF HEALTH.

(The Ohio State Medical Journal, July, 1910.)

The Owen bill for creating a National Department of Health has been published in a preceding number of The Journal, together with the eloquent speech of Senator Owen in support of his measure. The subject has been widely discussed and every physician is or should be thoroughly conversant with the various questions involved. By this time therefore, the views of the medical profession should be crystallized into a general opinion which should be firmly established and widely comprehended. Congress has adjourned with the bill not as yet brought to vote, but it will come up again at the next session, and in the meanwhile there is opportunity for much excellent missionary work.

There seems to be a widespread feeling that something should be done to establish national health matters on a firmer base. The only opposition comes from the proprietary medicine interests and the various cults which exploit the public for their own selfish profits, and which have grounds for fearing anything whatever which savors of protecting the people from suffering or disease. They want an "open season" all the year round with no restrictions of any kind.

Hence the birth of the National League of Medical Freedom (God save the mark) with its newspaper appeals to credulity and ignorance, its righteous indignation over the curtailment of personal liberty and so on *ad nauseam!* We feel that this opposition will not receive very serious consideration, but it must be by no means overlooked, and every opportunity should be grasped to show its real object.

With regard to the general sentiment toward reorganization of national health matters, while as we have said above, there is more or less unanimity that something should be done, there are many honest differences of opinion as to the solution of the problem. Some think that the Owen bill by providing for appointment of political doctors will seriously impair the excellent laboratory work now being done in the Marine Hospital Service. Others think that a Bureau of Health is sufficient, alleging the great expense of a department as an objection. Still others for party reasons oppose the measure, and so on. In reply to the first, let us get our department and then see that it is properly safeguarded; it is foolish in the extreme to let what may be an empty shadow stand in the way of a great benefit. Secondly, Senator Owen in his speech abundantly demonstrated the shortcomings of a bureau and the necessity of a department. If it is a necessity it will prove cheapest in the long run. Thirdly, if the dominant party is not content to pass a bill of this character simply because of its origin in the minority, in the name of thousands of sick and dying Americans let it provide a proper measure of its own! It is the substance we seek—not the name.

POLICLINICO, ROME.

June 19, XVII, No. 25, pp. 771-802.

Cause and Transmission of Pellagra.

L. W. SAMBON.

(Journal of The A. M. A., July 23, 1910.)

Minute Sand-Fly Responsible for Transmission of Pellagra.—Sambon gives the reasons which have convinced him that pellagra is of parasitic origin and that the parasite is transmitted by a minute biting midge, a *Simulium,* as mentioned in a news item in The Journal recently. His study of pellagra in Italy in 1900 established to his satisfaction that the cause must be sought elsewhere than in corn, and his research in London last winter confirmed the possibility of transmission of the disease by the *Simulium,* and his investigations now being conducted in Italy have, he declares, definitely established it as a reality. Pellagra follows water courses, and only persons much in the open are attacked. The midge in question breeds in water and does not seek to enter houses. The disease is not contagious, and its peculiar incidence in families is due to the fact that those infected elsewhere return home later and are the only ones affected. When all the members of the family are exposed to the bites of the *Simulium* they are all liable to contract the disease. He has encountered entire families in which all the members from the babe in arms upward were affected. In one family near Padua there were five children between three and twelve present-

ing the skin manifestations in the most pronounced form. The manifest connection with breeding places and habitats for the sand-flies, the exemption of inhabited centers, the season in which the disease appears and the prevalence of the *Simulium* in all the localities examined where pellagra is endemic, are only part of the evidence incriminating these midges. (Sambon has now returned to England; among his companions in the pellagra commission in Italy for part of the time were three Americans, Captain Tiler and Drs. Lavinder and Blue, of the P. H. and M.-H. S.)

MUNCHENER MEDIZINISCHE WOCHENSCHRIFT.

June 14, LVII, No. 24, pp. 1265-1320.

Training Children to Prevent Tendency to Constipation. (Is die Ausdrucksweise "Angeborene Hartleibigkeit" Eine Richtig Bezeichnungsweise?) R. B. Budberg.

(Journal A. M. A.)

Prevention of Constipation in the Young—Budberg writes from China to call attention to the constant absence of constipation among the children in the Orient. He asscribes this to the regular habits in respect to defecation impressed on the children from birth. When it wakes in the morning even the newborn infant is trained to defecate at once. The mother takes the rump of the infant between her hands and holds the child up, its back toward her, pressing its thighs against its abdomen while her thumbs push on its back or she presses its back against her knee or breast. This position impels the infant to strain, and the mother talks soothingly to it to facilitate its yielding to this impulse. In China and Japan, consequently, he says, the infant of even two months keeps clean and dry while all the ills of constipation in infants and children are thus averted by these regular habits.

NORSK MAGAZIN FOR LÆGEVIDENSKABEN, CHRISTIANIA.

June, LXXI, No. 6, pp. 569-656.

Chronic Nicotin Poisoning. (Kronisk nikotinforgiftning. Skraatobak.) A. Tanberg.

(Journal A. M. A.)

Chronic Nicotin Poisoning—The symptoms in the case described suggested beriberi, as no other cause could be found for the disturbances noted during the last six years, but the patient had never been where beriberi was endemic. There were no indications of syphilis or alcoholism and the patient smoked merely one or two cigars a day. The digestive, sensory and motor disturbances, tachycardia, arrhythmia and insomnia persisted unmodified by staying in bed, but the casual discovery of a plug of chewing tobacco gave the clue to the diagnosis. It seems that the man had been in the habit of chewing about 40 gm. of plug tobacco daily. Complete suspension of tobacco soon banished all the symptoms, but they returned promptly a few months later when he tried to resume the habit. No other treatment for the chronic nicotin poisoning was needed beyond the mere abrupt suspension of the tobacco.

DERMATOLOGY,

(Edited by A. J. Markley, M. D., Denver, Colo.)

(Colorado Medicine, July, 1910.)

Syphilis Acquista Tarda.

Grindon reports (Journal of Cutaneous Diseases, June, 1910,) a case of un-

treated syphilis in which the first cutaneous symptoms appeared twenty years after the infection. The patient, a highly intelligent physician, presented himself for treatment of certain lesions on the face which were evidently syphilitic and were quickly healed by specific treatment. He stated that twenty years previously he had been infected during the delivery of a woman with active lesions, and a chancre had developed on the right index finger. Carefully watching for weeks, months, and then years, revealed no signs of skin or other constitutional manifestations, until the appearance of the lesions on the face.

MEDICOLITERARY NOTES.

(New York Medical Journal, July 9, 1910.)

In the July Harper's Dr. W. W. Keen gives a popular description of "The New Surgery," supplementing a previous article on the same subject contributed about a year ago.

* * *

Cabanès, in the fifth volume of his Indiscrétions de l'histoire," begins a sort of historical diagnosis of the case of Charles Quint, with a few reflections on the epigram of Moreau, of Tours, that genius is a neurosis. He is disposed to think that the saying was due to professional narrowness on Moreau's part. Every individual, says Cabanès, from the specialist's standpoint, suffers from the disease in which he specializes; nothing is easier for a physician than to see only invalids on every side. Such diagnosis is popular. The *profanum vulgus* likes to think that great conquerors and social or political leaders suffer the same pains, undergo the same physical tortures as itself. Some humorist said that, although pity did not cure envy, it consoled us for suffering from it.

* * *

McClure's Magazine, which always contains matter of interest to the medical profession, is particularly rich therein in the July issue. The real hero of "The Unparalleled Invasion," Jack London's blood-curdling fantasy, is Jacobus Laningdale, a laboratory pathologist; John Burroughs writes entertainingly of "Animal Behavior and the New Psychology," and ventures the statement that "zoos" like that in the Bronx may be amusing, but are not instructive; our colleague of the Lancet, Dr. R. Austin Freeman, tells how Dr. Thorndyke solved the mystery of "The Aluminum Dagger."

* * *

In the July Strand there is a history of Gounod's "Faust," which includes a story told by Gounod himself. When it was to be given in Rome an impresario wrote to the composer, saying that, as the ecclesiastical censor had prohibited the appearance of the devil on the stage, he could perhaps transform the character of Mephistopheles and make him "for instance, a physician."

* * *

There is an amusing but sane and philosophical editorial on women in the July Scribner's, in which the writer explains that maternity is of the essence of woman, not an accident or a fashion, and, therefore, that the race is not in danger on account of woman's present multifarious activities:

* * *

The Red Book, of Chicago, is now with 192 pages, the largest illustrated magazine in the world. The July issue has several pages devoted to plays so far produced only in Chicago. This is significant, for the United States is so huge as to require more than one metropolis. Even from a medical standpoint New York does not occupy the unique position in our country, of Paris, Berlin and London in their respective lands.

PERSONAL ITEMS.

Dr. L. Rosa H. Gantt, of Spartanburg, S. C., has been appointed a mem-

ber of the advisory committee of the Public Health Department of the General Federation of Women's Clubs.

Miss Jane A. Delano reports that nearly 10,000 trained nurses have joined the army nurses' corps. Miss Delano is superintendent of the corps, with headquarters in Washington. She is shortly going on an inspection tour through the Philippines.

NEWS ITEMS.

A special report on birth registration is being prepared under the direction of Dr. Cressy L. Wilbur, Chief of the Division of Vital Statistics of the Bureau of the Census, for the first annual meeting of the American Association for Study and Prevention of Infant Mortality, which will be held in Baltimore in November. The report of the committee on birth registration will be presented at the session on municipal, State and Federal prevention, of which Dr. Wm. H. Welch is chairman. The members of the committee on birth registration include in addition to Dr. Wilbur:

Dr. Wilmer R. Batt, Commissioner of Vital Statistics, Harrisburg, Pa.

Dr. Charles V. Chapin, Commissioner of Health, Providence, R. I.

Dr. John S. Fulton, Sec. General Int. Cong. on Hygiene and Demography, Washington, D. C.

Dr. John N. Hurty, Secretary State Board of Health, Indianapolis, Ind.

Dr. Wm. C. Woodward, health officer, Washington, D. C.

The meeting will open with a general session on November 9th. On the 10th and 11th there will be four special sessions as follows:

Municipal, State and Federal Prevention—Chairman, Dr. Wm. H. Welch, Johns Hopkins Medical School, Baltimore; secretary, Dr. John S. Fulton, Sec. General Int. Cong. on Hygiene and Demography, Washington.

Medical Prevention—Chairman, Dr. L. Emmett Holt, 14 W. 55th Street, New York City; secretary, Dr. Philip Van Ingen, 125 East 71st Street, New York City.

Educational Prevention—Chairman, Dr. Helen C. Putnam, chairman of the committee to investigate the teaching of hygiene, appointed by the American Academy of Medicine, 1903, Providence, R. I.; secretary, Prof. Abby L. Marlatt, Department of Home Economics, University of Wisconsin, Madison, Wis.

Philanthropic Prevention—Chairman, Dr. Hastings H. Hart, director Department of Child-Helping, Russell Sage Foundation, 105 E. 23rd Street, New York City; secretary, Mr. Sherman C. Kingsley, Superintendent United Charities, Chicago, Ill.

The officers of the Association are:

President, Dr. J. H. Mason Knox, Jr., Baltimore.

President-elect, Prof. Chas. Richmond Henderson, Chicago.

Vice-president, Prof. C. E. A. Winslow, Boston.

Vice-president, Mr. Homer Folks, New York City.

Secretary, Dr. Linnaeus E. La Fetra, editor archives of Pediatrics, New York City.

Treasurer, Mr. Austin McLanahan, care of Alex. Brown & Sons, Baltimore.

Every section of the country is repsented in the directorate.

The headquarters of the Association are in the Medical and Chirurgical Faculty Building, 1211 Cathedral Street, Baltimore, Md.

For information or circulars write to the executive secretary, Gertrude B. Knipp.

[*From the Lay Press.*]

DIED A MARTYR TO MEDICAL WORK.

Dr. M. K. Kassabian a Victim of the X-Ray, Which He Constantly Used.

Operations in Vain.

HAD SUFFERED FOR YEARS FROM MYSTERIOUS AGENCY—AN EXPERT IN HIS LINE.

(From the Philadelphia Record, Monday, July 13th, 1910.)

Another name was added yesterday to the list of those medical pioneers who have sacrificed their lives in the cause of science, when Dr. Mihran K. Kassabian, an eminent specialist in X-ray work, died in the Jefferson Hospital of burns that he received from the mysterious rays during years of continuous research and investigation. In the presence of his devoted young wife, who constantly tended him during his illness, he passed away early in the morning.

Dr. Kassabian, who had experimented with the X-rays for many years, received his first injury in 1902, when the finger nails on his hands were burned. He placed himself in the care of physicians, who noticed that the burns produced an effect on the skin similar to that of cancer. Two years ago his hands became so badly affected that it was found necessary to amputate two fingers, Dr. W. W. Keen performing the operation in the Jefferson Hospital. The operation, however, did not check the progress of the cancer-like affliction, and a year ago it was found to be extending up his left arm, causing an enlargement of the glands under the arm-pit. This became so serious that it was found necessary to remove the glands, Dr. J. Chalmers DaCosta operating.

Operations of No Avail.

The second operation proved as futile as the first, and it was considered urgent to subject the patient to a third operation consisting of the removal of certain muscles on the left side of his chest. This was accomplished about four months ago, and, serious though it was, Dr. Kassabian appeared to some extent to rally from it. Indeed, he continued his work with almost the same vigor as if he had been in the best of health. About ten days ago, when the scientist went to the Jefferson Hospital to have the wounds on his chest dressed, he collapsed, and it was found necessary to remove him to a private room in the hospital. Though attended constantly by the most skillful physicians, his condition became worse each day until he passed away.

Dr. Kassabian, who was an Armenian, was born in Caesarea, Asia Minor, forty-two years ago, and in 1894 came to the United States to study medicine. He entered the Medico-Chirurgical College in 1898, and in the same year, while the Spanish-American war was in progress, served in the hospital corps of the army and attended many sick and fever-stricken soldiers brought from the Southern camps. After graduating he became instructor in electro-therapeutics and X-ray treatment in Medico-Chirurgical College. In 1902 he resigned from this position to become director of the Roentgen ray laboratory in the Philadelphia General Hospital, a position that he

held until the time of his death. Not once during his long illness did Dr. Kassabian lose interest in his work, although for the last eight months, realizing the seriousness of his condition, he superintended rather than actively engaged in his work in order to avoid any further danger.

Wrote Books on X-Rays.

As an acknowledged authority on the subject of X-rays Dr. Kassabian was chosen to represent the United States at conventions of X-ray experts that were held several years ago in London and in Paris. Among his works are several books treating of his favorite subject. The most important of these, "Electro-Therapeutics and the Roentgen Rays," is now used as a text book in leading medical colleges. Among his inventions was a method for improving skiographs. Originally these pictures, photographs of the interior of the human body, produced an effect as if the ribs were lying flat against the spine. There was no effect of rotundity. Dr. Kassabian invented an appliance for the skiograph apparatus whereby the desired effect of roundness was produced.

The doctor was a member of the Philadelphia County Medical Society, the Roentgen Society and the Medical Club of Philadelphia. About eighteen months ago he went to Constantinople to marry Miss Virginia Giragosian, of that city. Besides his widow he leaves three brothers, jewelers in Smyrna, and in this city a 16-year-old nephew, Leo Kassabian, who is stdying X-rays and the science of skiography. Funeral services will take place probably on Friday afternoon at Oliver Baer's undertaking establishment on Chestnut Street, near 19th. The service will be conducted by Rev. Dr. H. T. Yardumian, of the Armenian Evangelical congregation. Masonic rites will also be held at Arlington Cemetery by Olivet Lodge, F. and A. M.

Danger is Now Minimized.

In speaking of Dr. Kassabian's death a distinguished physician, who is himself an expert in the use of the X-rays, said yesterday:

"Dr. Kassabian was one of the early operators and added much to the science at a time when its dangers were unknown. He worked faithfully at the Medico-Chirurgical Hospital, both night and day, whenever a patient needed his care. During those early years many of the examinations were made fluoroscopically instead of by plates. This necessitated exposure of the operator during all the time that any of the patients were being examined. In this way he got thousands of times as much exposure as any one patient would get, and by continuing for a long time he did irreparable damage to his skin. During all this time none of the patients to whom he gave his services suffered from the effects of the exposure. To-day absolute precautions to both operator and patient are possible, and the specialists who are thoroughly equipped make these examinations with very short exposures, using seconds, where formerly minutes and even hours were necessary. The rays are absolutely confined to the parts under examination, and I know of no record of injury from the rays during an examination in recent years, when such examination was made by a skilled operator who was thoroughly equipped.

"Dr. Kassabian's enthusiasm carried him away and made a martyr of him to this science. He felt deeply the sufferings of those colleagues who have preceded him, and collected the names and histories of these men, intending to publish a memorial to them. This shows clearly that he did not attempt to make a secret of his troubles, nor of the troubles of others."

COLUMBIA'S MILK SUPPLY. EXAMINED.

(From the State, Columbia, S. C., July 26.)

A bacteriological examination and qualitative test of milk from all the dairies in Columbia and cream from three which import into the city has been made by the Columbia Board of Health.

As a result, Dr. W. A. Boyd has prohibited the importation of cream from the dairy of A. H. Wherry, in North Carolina.

The examination and analysis of the samples were made by two bacteriologists. Neither knew where the samples came from, as they were numbered and the key to the numbers was in Dr. Boyd's possession.

All dairy permits will be revoked on July 31. The proprietors must fill out application blanks before new permits will be issued. This action is taken in order that the new board of health may know exactly the condition of all the dairies in Columbia. Application blanks can be obtained from Dr. W. A. Boyd, health officer.

The results of the bacteriological examination and analysis of samples of milk from all the dairies of Columbia are given in the table below:

Dairy.	Bacterial Count.	Proteins. (Per cent.)	Fats. (Per cent.)
Taylor	331,000	3.12	3.37
Fairworld Farms	18,000	3.37	2.80
Prince	120,000	3.50	2.66
Strickland	540,000	3.28	2.02
English	700,000	3.50	4.00
Lainey	300,000	3.60	3.00
Pettigrew	500,000	3.80	3.80
Bowen	5,300,000	3.55	3.61
Jeter	165,000	3.23	3.04
Black	230,000	5.60	4.20
Hughes	400,000	4.00	5.00

None of the above samples contained preservatives, adulterants or typhoid bacillus.

Dyches—Dairy closed by order Board of Health.

Huffman—Building new barn; no test made.

The examination of the creams shipped into Columbia has not yet been completed. The results of the examination of samples from three out-of-town dairies are given below:

Dairy	Sample 1 A. H. Wherry, (N. C.)	Sample 2 A. H. Wherry, (N. C.)	Hitchcock (Aiken)
Where obtained	Thomas' Drug store	Thomas' Drug store	Thomas' Drug store
Bacterial count	9,700,000	5,000,000	2,500,000
Fats	19.96 per cent.	Not estimated	Not estimated
Temperature at delivery	Not taken	64° F.	48° F.
Dairy	Sample 1 Mason (Greenwood)	Sample 2 Mason (Greenwood)	
Where obtained	Miot's Drug store	Miot's Drug store	
Bacterial count	In excess of 2,000,000	4,000,000	
Fats	20 per cent.		
Temperature at delivery		71° F.	

DR. T. B. MANNING.

(Columbia S. C. State, August 8, 1910.)

Bishopville, August 8.—Dr. T. B. Manning, who has been an invalid for the

last three years, quietly passed away today at 2 o'clock. Dr. Manning came here from Marlboro County a number of years ago and began to practice his profession, which he continued with much success until a few years ago, when he began to fail in health. The funeral arrangements have not yet been announced. Dr. Manning leaves a devoted wife and several children.

PURE FOOD LAW TO BE ENFORCED.

Inspector Will be Named by Commissioner Watson—Act Was Changed Last Year—Now Under Department of Agriculture and Severe Penalties Are Provided.

(Greenville Daily News, July 20, 1910.)

Within the next two weeks the enforcement of the pure food and drug act of the State will be under the Department of Agriculture. This was decided upon at a conference between Dr. C. F. Williams, the secretary of the State Board of Health, and Commissioner Watson. The commissioner of agriculture has selected an inspector whose appointment will be announced within the present week. The inspectors, under the commercial food stuffs act, will assist in the enforcement of the pure food and drug act. The analytical work will be done at the laboratories established at Clemson College.

The addition of the work of enforcing the pure food and drug act by the Department of Agriculture was brought about by the following clause of the commercial foodstuffs act, which is as follows: "Such inspectors shall also assist in the enforcement of the pure food and drug law of the State."

The pure food law provides that it shall be unlawful for any person to manufacture or offer for sale any article of food or drugs which is adulterated or misbranded. For the violation of any section of the provisions of the act there is a fine of $50 and imprisonment not exceeding fifteen days for the first offence and $100 or thirty days for subsequent offences.

Under the pure food and pure drug act the sum of $1,000 is appropriated for the purpose of defraying the expenses, if any, of analysis or examination of any article of food or drug provided for in the act.

WEEKLY BATHS FOR EVERYBODY.

Police of Aurora, Ill., Issue Regulations for All the Residents.

(Evening Post, Charleston, S. C., July 27, 1910.)

Aurora, Ill., July 27.—Aurora residents, especially foreigners, are ordered, in a list of rules just issued by the Board of Health and signed by the mayor and the chief of police, to take a bath once a week or be arrested.

Copies of the order are to be placed in all of the boarding houses and homes of foreigners in Aurora.

The rule fixing the number of baths that a man shall take is only one of fifteen issued by the board. Women are told to scrub their floors once a week, sweep all carpets, air bedrooms and keep yards clean, or be arrested.

One rule says that but two shall be allowed to sleep in a bed.

CONFERENCE ON PELLAGRA.

(From the Daily Record, Columbia, S. C., Aug. 3, 1910.)

South Carolina will be represented at the third national conference for the study of pellagra, which will be held very probably in Chicago during the fall. It was the intention of those having the matter in charge to meet at Peoria, Ill., but since Chicago is the larger place, and

therefore it will be easier to get a larger crowd there, the plans may be changed. Dr. J. W. Babcock, of the State Hospital for the Insane, will probably deliver an address on "Pellagra in South Carolina." This State is to be made the center for the study of pellagra by the Government in the new phase touching a possible cause of the disease. It is interesting to note that two Government experts have been stationed here studying the disease —Drs. Lavinder and Long—during the last two years. Pellagra is now known to be prevalent in twenty-nine States of the Union. It has been found in the South, in States as far north as Pennsylvania and out in California.

BUSY DAYS AT ASYLUM.

Patients Sleep on the Porches Pending the Completion of Three New Buildings.

(Daily Record, Columbia, S. C., July 20, 1910.)

There are busy scenes this week at the State Hospital for the Insane, where the erection of three new buildings has been started and the work on the completion of the "Taylor Building" is under way. Dr. J. W. Babcock says that the work will be rushed as fast as possible in order to provide for the immediate needs of the asylum. There are nearly 1,600 patients at the asylum, and at this season of the year many are coming in. It has been found necessary to place some of the patients out on the porches to sleep, owing to the crowded condition of the several wards.

The "Taylor Building" was designed for the use of white men patients, but was never completed. The work was commenced on it a few years ago and one wing was not completed. This is the work that is now being done at the hospital. As soon as the Taylor Building is completed some of the patients will be carried to the wards there immediately. This will, it is stated, relieve to some extent the crowds in the white men's wards.

Three other buildings are to be put up on the asylum property. One of these will be used for negro men, another for invalid white women and the third for the same class of colored women patients. The occupancy of the buildings by colored patients will be only temporary.

It is the purpose of the commission to provide another asylum just outside of Columbia or in another part of the State for the colored insane. This will be done when the commission purchases additional lands.

SEVENTH DISTRICT DOCTORS WILL MEET.

First Annual Meeting To-Morrow at Ridgewood Club—Interesting Papers to be Read.

(From the State, Columbia, S. C., July 20th, 1910.)

The first semi-annual meeting of the Seventh District Medical Society will be held at Ridgewood Club to-morrow at noon. The meeting will be opened with an address by the president, Dr. James H. McIntosh. After the programme has been concluded, dinner will be served at the club. The officers of the society are: President, Dr. James H. McIntosh, Columbia; vice-president, Dr. Charles B. Geiger, Manning; secretary-treasurer, Dr. Mary R. Baker, Columbia.

The papers to be read at the meeting:

"The Difficulties of Sanitation in Rural Districts," Dr. H. L. Wilson, Jordan.

"The 1910 American Medical Association," Dr. A. E. Hines, Seneca.

"The Alkaline Treatment of Typhoid Fever," Dr. E. E. Telott, Lynchburg.

"Goitre," Dr. A. B. Knowlton, Columbia.

"The Indications for the Use of

Medicine in Pneumonia," Dr. W. S. Lynch, Scranton.

"Uses of Medicine in Literature," Dr. R. W. Gibbes, Columbia.

THE MOSQUITO.

We take pleasure in quoting the following, showing the intelligent interest in sanitation displayed by some of our daily papers: (*Editor.*)

(From the Greenville Daily News, July 18, 1910.)

Dangerous Habits of the Mosquito.

The mosquito needs no introduction to a South Carolina public. Few, if any, of our people have been overlooked by this cheerful pest as she goes her rounds, singing gaily the while she swaps us a bill of malaria germs in exchange for a square meal of our precious red blood corpuscles, a swindle which outclasses any gold brick deal or horse swapping "coup" ever devised or perpetrated by man. She takes what blood she can, leaving behind the seeds of a poison which, if unchecked, will in time destroy the remaining blood cells of her victim, leading to anemia, lowered vitality, lessened efficiency, even death, directly or from inability to resist intercurrent disease.

A human fiend who would enter our stores and markets by night, and after gorging himself, leaving poison in all the remaining food to spread suffering, disease and death throughout the community, would be execrated, pursued and torn to pieces by an outraged populace—yet a useless insect, playing this role to perfection, is living among us constantly and is regarded merely as a mild source of annoyance, often as a subject of jest.

Elemental Knowledge Necessary For Mosquito Extermination.

It is within our power to lessen materially the discomfort and disease produced and spread by insects—it is not beyond the bounds of possibility to abolish them entirely some day—the prime prerequisites to such an undertaking being, first the participation of every man, woman and child of us; and, second, a proper understanding of the life history of the insects in question and the proper methods for their systematic destruction.

The chief important fact about mosquitoes is this: Without the existence of standing water their breeding is impossible; furthermore, they require at least ten days in such water for development, so that ample time is always ours after rains and floods for the draining and filling of accidental pools. With practically no exceptions, all varieties of mosquito deposit their eggs in water, or the eggs require immersion in water for their incubation, must live in water in order to develop to the adult or insect stage. It is this peculiarity of which we should take advantage, for by removing al pools and collections of standing water which permit of larvae or wrigglers. Where removal of the water is a physical impossibility, we can attack the delicate eggs, larvae and pupae with greatest hopes of success, following methods to be described later.

The female mosquito lays from 50 to 200 eggs in water, or, in some cases, in depressions which will be filled with water by rain. The eggs are laid singly or in masses, the manner varying with the genus. The larvae escape from the under sides of the eggs in from ten hours to two or three days. These larvae are air breathers. They remain at the surface of the water or return to it from time to time in order to take in air through the breathing tubes which they are provided. By means of the long waving hairs about the mouth parts, the larva creates a current in the water, thereby sweeping into its mouth the minute particles of suspended animal matter, spores of algae, etc., which con-

stitute its food. After from seven to twenty days' growth, the larva is transformed into the pupa, which later develops in from two to ten days into the fully developed flying mosquito. The periods given above are the average extremes for the varieties of mosquito common to South Carolina. These periods are slightly different for the different genera. They may be shortened by warm weather and sunshine, extended or prolonged by cold. The average time of development from egg to full grown insect is ten days for the Culex or ordinary variety, and twenty-one days for the Anopheles or malaria-bearing mosquito. Since the entire process of development takes place in water, the preferred method of prevention is obvious.

Do not allow collections of water to remain as long as ten days.

In common with many other insects mosquitoes have the habit of hibernation, *i. e.*, remaining in a torpid state for indefinite periods during cold weather. This period of hibernation may be passed in the egg, larva or adult form according to genus.

The Anopheles or malaria mosquito hibernates in adult form, preferring dark closets, the under sides of shelves in attics and pantries, under culverts, bridges, stairways, in outhouses, etc. This method is also usual with the Culex, our ordinary day-flying mosquito.

As already stated, the larvae and pupae feed on animal matter suspended in the water in which they develop. The adult mosquito lives on plant juices, the honey of flowers and fruit juices, but the male will live indefinitely on water alone, and does not bite animals or care for warm blood, whereas the female is constantly seeking a meal of blood from some warm-blooded animal, and often will not lay eggs without first having this meal. So voracious are the mosquitoes of some countries that they have been seen piercing the heads of young fish, attacking turtles on the bank of streams and piercing butterfly chrysalides. In the short Arctic summers of Alaska the mosquitoes of certain swampy regions are much dreaded by animals and explorers.

Under normal summer conditions the life of the adult mosquito is short, and is dependent mainly on the opportunity for propagation. Several broods a season may be produced by a single female.

Mosquitoes do not fly great distances, one-half mile is probably the limit of range for a single flight; so that, generally speaking, they are found only within that distance of their breeding place, but they may travel a greater distance when aided by winds; they may also be transported in clothing or on the persons of human beings. It has been shown that they may fly from the shore to a ship anchored as much as a mile from the shore.

Their vertical range is also limited, the lower stories of houses are usually more thickly infested than the upper stories. In very high buildings the upper floors are free from mosquitoes, unless they are transported by persons. In the extreme Arctic regions they are not found; they are not found normally beyond an elevation of 5,000 feet above sea level.

Relation of Mosquitoes to Disease.

That mosquitoes spread disease had been suspected for some time, even as far back as the time of the earliest medical writers, when the work of Ross in 1897 definitely proved this fact in the case of malarial fever. His observations have since been confirmed by Grassi, McCallum, Bastianelle, Bignami and others. There is to-day no other belief tenable concerning the transmission of malarial fevers. Other diseases known to be transmitted through the bite of the mosquito are yellow fever and filariasis. These diseases and the corresponding species of mosquito may be conveniently arranged thus:

The malarial fevers spread by..... Anopheles.

Yellow Fever spread by..... Stegomyia Calopus.

Filaria infection spread by..... Anopheles, Stegomyia, Culex Fatigans.

Dengue (?) spread by.....(?)

The Malarial Fevers.

It is a fact that malaria cannot be transmitted from one person to another, except by the agency of the Anopheles mosquito. In short, if we exterminated this one genus we would have abolished malaria. While such a complete conquest may not be possible still an enormous reduction in the amount of malaria and in the numbers of mosquitoes may be affected, and since the measures directed against annoyance will be vastly gratifying.

That the measures to be urged are possible and practical has been proved by the operations of the United States Government near Washington, the drainage of the New Jersey marshes, the work of Dr. Doty, of New York, and last, but not least, by the brilliant results achieved near Charleston by the Drainage Commission of our own State under the leadership of Hon. James Cosgrove.

Malaria fever is caused by the growth, in the red blood cells of the human being, of a minute animal parasite low down in the scale of life. By its development and reproduction it gradually destroys the blood cells, causing more or less fever, chills and sweating in the acute stage. In untreated and chronic cases it causes its victims to become pale and yellowish, unable to work or endure exertion, deficient in appetite, energy and ambition. In some forms, known as the pernicious forms, it is rapidly fatal.

The germ or parasite can enter the body only by the bite of an Anopheles mosquito, which latter must previously have sucked up the germ along with blood from some other person having malaria of several days duration. The mosquito is harmless unless it has previously bitten a malaria-infected individual. Once in a person's blood, the germ, or plasmodium, as it is called, can continue to reproduce and multiply indefinitely unless killed by medicine, making its victim sicker all the time and gradually or rapidly destroying the blood cells. But it cannot get to another person unless carried by a mosquito—the female Anopheles, and it must undergo a further development in the mosquito, requiring about fourteen days before it is again in proper form to infect a second person. During this time it undergoes a complicated series of changes and passes from the stomach of the mosquito to the salivary glands at the base of the proboscis or beak of the insect, through which it is injected into the next person bitten.

These facts have been proved by the experiments of scientists time after time. Furthermore, it has never been proved that the disease can be acquired or transmitted in any other way, although painstaking efforts have been made by drinking swamp water, breathing bad air, etc. In such cases the experimenters who volunteered to sacrifice themselves failed to contract malaria as long as they were protected from mosquitoes. Dr. Sanborn spent an entire hot season in the Roman Campagna, one of the most notoriously malarial regions of the world. He drank and ate what he pleased, and slept practically in the open air all night, taking only the precaution to retire to his screened room before sundown and remaining there until after sunrise. Neither he nor his companion suffered any ill effect nor showed any symptoms of malaria. It is not absolutely true that the Anopheles bites only at night, as a few varieties bite in the late afternoon and in the early morning hours. In those cases of malaria, apparently due to fatigue or exposure to wet, the persons have already been infected by

mosquitoes' bites, and the lowering vitality and natural resisting power by chilling the surface simply gives the malarial poison a favorable opportunity for development and outbreak.

Yellow Fever, Filariasis and Dengue.

Yellow fever is a disease dreaded the world over. While usually considered a tropical disease, it has visited South Carolina and has occurred as far north as Baltimore and Philadelphia in the United States. The Stegomyia Calopus, the mosquito which transmits the disease, is always present in South Carolina, so that we are liable to an epidemic at any time should a case of the disease gain access to our State.

Filariasis means the growth in the blood of a species of worm. The worm is introduced during the biting act of certain mosquitoes. The worms multiply, block up the lymph channels of the body and cause certain conditions known as chyluria and elephantiasis, ending usually in death. It is probable that dengue, or breakbone fever, is transmitted by the mosquito, but this has not been proved as yet.

How to Fight the Mosquito.

The only rational way to fight the mosquito is to destroy the place and opportunity for breeding, remembering always that the main object in view is the removal of all collections of standing water within a week of their formation. According to the extent of the work required and the legal steps necessary the campaign must be conducted by:

1. The Commonwealth.
2. The municipality.
3. The individual.

The major engineering operations, such as the draining and reclaiming of large swamp areas and jungles, the condemnation of lakes, the maintenance of river and canal banks in clean condition, etc., will have to be undertaken by State or county authority through the Sanitary and Drainage Commission. A notable example of the success of such work is illustrated in this bulletin. The region drained and reclaimed was at one time a miasmatic jungle, uninhabitable and lying unproductive. It is now valuable trucking and farming land. To quote from the report of the report of the Commission:

Active work was begun in the spring of 1902 in the section lying between the city limits and the county line at Ten-Mile Hill. This territory had been always considered unhealthy, so much so that a white man would not sleep one summer's night anywhere in it for fear of 'catching the fever.' The first place drained was 'Horlbeck's woods,' and the result was so good from the standpoint of health that to-day there are three manufacturing plants here established, with a large number of operatives living on the premises the entire year free from malaria.

And a property value created amounting to over $600,000. The busy hum of machinery takes the place to-day of the hoot of the owl and the buzz of the mosquito of a few years ago. This is but one example of the many improvements that followed the drainage of this section, "Chicora Place." A new town is being built, a modern refrigerator is under construction, acre after acre of land is being opened up for cultivation, several dairy farms have been established. The Southern Mahogany Company is building a wood transforming plant. The Texas Oil Company will build a large refinery; a sugar refinery is being prospected. Land values have increased enormously and on every side are seen the evidences of the development of a country that but for drainage would have probably lain dormant for years."

In other sections of the county the drainage system is being rapidly in-

troduced, and within a few years it is expected that "malaria" will be driven out of Charleston County entirely.

In surburban regions where houses and yards are widely separated, it is usually true that each householder is responsible for the breeding of his own mosquitoes. All pools and collections of water should be immediately filled or drained to dryness. Small collections which do not permit of this should be sprinkled with crude petroleum or kerosene, enough being put on to form a visible coating over the entire surface. This should be renewed every two weeks and also after every rain. The oil stops up the breathing tubes of the larvae and suffocates them. Ponds and streams should be stocked with fish. The best larva destroyers are top minnows, sticklebacks, carps, sunfish, goldfish and silverfish. The banks of ponds, lakes and brooks should be kept free from vegetation and lily pads, and stagnation should be prevented; the sides of ditches and drains should be kept vertical and free from weeds and trash. The drains and ditches should be kept clean and give sufficient fall to carry off all water. Kerosene should be run through covered drains and culverts at regular times. Among the breeding places liable to be overlooked about the house and yard are the following:

Rain water puddles, disused springs and wells, rain water barrels, cesspools, tin cans, old bottles, water pans for pets or chickens, horse troughs, roof gutters clogged with leaves or trash, knot holes in trees, crevices between branches.

All such should be emptied of their water, given a treatment with kerosene or carefully screened, no water being allowed to stand for a week, if possible.

It is hardly necessary, after all that has been said, to urge the complete screening of all living and sleeping quarters. The difference in ventilation is negligible in spite of prejudice to the contrary, and the expense is small. If metal screens cannot be afforded, ordinary mosquito netting is cheap, will last for some time and is easily renewed.

In the house the use of netting over beds is advisable. It should be obligatory in the case of the sick. The burning of pyrethrum or so-called Asiatic powder, the use of various volatile substances, such as tobacco, camphor, kerosene, turpentine and the oils of pennyroyal, citronella, eucalyptus, etc., are valuable in keeping the insects away temporarily. They may be destroyed in a closed room by the fumes of burning pyrethrum or flowers of sulphur.

None of the makeshifts last mentioned should be considered of any importance when compared with the destruction of breeding places and the complete screening of homes.

SURGICAL SUGGESTIONS.

The presence of papulo-squamous tuberculides may be the only means of recognition of tuberculosis in infancy.—American Journal of Surgery.

Unexplained septic temperature in an infant should lead to the search for a hidden osteomyelitic focus—especially in the upper end of the femur.—American Journal of Surgery.

A foreign body lodged in a bronchus may present a symptom-complex identical with pulmonary tuberculosis in a child—the history of aspiration of the foreign body may be wanting—American Journal of Surgery.

NEW EDITION OF GRAY'S ANATOMY.

(Literary Note.)

A man may be a great anatomist or a great teacher, but when one man combines these two faculties his single mind, by its complete co-operation, can produce

a teaching book in which matter and method blend into a result obtainable in no other way. This double-sided genius was possessed by Henry Gray, and until Nature grants to one individual like endowments, his work will stand. Owing to the incessant activity in all branches of medicine, books in any of its departments are almost invariably short-lived. The single exception to this rule is "Gray's Anatomy." In the fifty years since the author's early death it has grown beyond even the leadership in its own subject, and has become the foremost medical book in all English literature. As English is now the world-language, this is equivalent to primacy in the medical literature of the world.

Eighteen editions have been demanded in the course of its half-century, and they have enlisted many of the ablest anatomists of this period. The principles on which Gray built his book have been followed, and it is not too much to say that during two generations it has guided the teaching of its subject in America as well as England. An army of students has conned its pages, and has carried it away into practice, for it is equally valuable to the physician and surgeon for reference on underlying points. In fact, the editor has made the applications of anatomy, in medicine as well as surgery, a special feature.

Of all the editions, this new one represents the most thorough revision. Every line has been scanned for possible improvement. Anything in the nature of a possible obscurity has been clarified, passages have been rewritten and new developments have been incorporated. Rearrangement has eliminated many duplications, and this, together with condensation in style, has rendered it possible to present more information in one hundred pages less space, to the reader's obvious advantage. Prof. Spitzka, the editor, is one of the foremost antomists in the world, and he joins to this the apt qualification of being himself an artist as well, so that the drawing from his own hand present his knowledge directly to the mind of the reader. Another of Gray's fundamental improvements, in which his book has always been unique, was the engraving of the names of the parts directly on them, so that the student learned at once not only their nomenclature, but also their position, extent and relations, the four cardinal points. The advantage of this graphic method over the elsewhere customary lines and reference letters is obvious. Gray's book was also the first to contain illustrations in colors. In this new edition, besides all the improvements in the text, the splendid series of characteristic illustrations has been equally revised, many cuts being replaced and more added, and the use of colors is more lavish than ever. No student in any profession, or in any branch of medicine, has offered to him any instrument of instruction comparable to "Gray's Anatomy." It suffices to say that the new edition will excel any of its predecessors.

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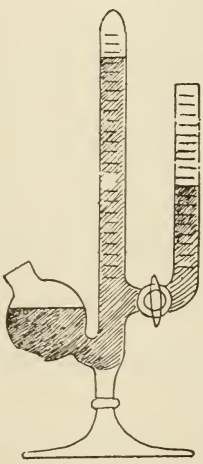
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30. R. L. Marchant, Greer, S. C.
31. J. E. McKinney, Greenville, S C.
32. W. Y. McDaniel. Taylors, S. C.
33. J. L. Orr, Greenville, S. C.
34. L. L. Richardson, Simpsonville, S. C.
35. R. D. Smith, Greenville, S. C.
36. H. L. Shaw, Fountain Inn, S. C.
37. L. C. Stephens, Greer, S. C.
38. S. C. Stroud, Marietta, S. C.
39. G T. Swandale, Greenville, S. C.
40. T. E. Stokes, Greenville, S. C.
41. T. R. Ware, Greenville, S. C.
42. A. White, Mauldins, S. C.
43. W. E. Wright, Greenville, S. C.
44. A. Wallace, Greenville, S. C.
45. R. M. Stephenson, Greer, S. C.

GEORGETOWN COUNTY, MEDICAL SOCIETY.

President, M. P. Moorer; Vice-President, H. D. Beckman; Secretary and Treasurer, J. LaBruce Ward.
Board of Censors—F. A. Bell, W. M. Gaillard, M. P. Moorer.

1. H. D. Beckman, Georgetown, S. C.
2. F. A. Bell, Sampit, S. C.
3. A. B. Clarke, Plantersville, S. C.
4. J. W Folk, Jessup, S. C.
5. W. M. Gaillard, Georgetown, S. C.
6. T. R. Howle, Rosemary, S. C.
7. M. P. Moorer, Georgetown, S. C.
8. Olin Sawyer, Georgetown, S. C.
9. J. LaBruce Ward, Georgetown, S. C.

GREENWOOD COUNTY MEDICAL SOCIETY.

President, H. N. Sloane; Vice-President, S. L. Swygert; Secretary and Treasurer, R. E. Mason.
Delegate—G. P. Neel.
Alternate—John Lyon.

1. W. P. Barrett, Greenwood, S. C.
2. S. L. Swygert, Greenwood, S. C.
3. J. B. Hughey, Greenwood, S. C.
4. G. P. Neel, Greenwood, S. C.
5. R. B. Epting, Greenwood, S. C.
6. J. B. Workman, Ware Shoals, S. C.
7. Willie T. Jones, Jones, S. C.
8. R. E. Mason, Greenwood, S. C.
9. J. E. Brunson.
10. J. B. Owens, Greenwood, S. C.
11. J. C. Harper, Greenwood, S. C.
12. W. P. Turner, Greenwood, S. C.
13. Jno. Lyon, Ninety-six, S. C.
14. H. N. Sloane, Ninety-six, S. C.
15. J. E. Brunson, Ninety-six, S. C.
16. W. H. Wideman, Bradley, S. C.
17. Y. M. Hitch, Hodges, S. C.

HAMPTON COUNTY MEDICAL SOCIETY.

1. J. W. Mole, Brunson, S. C.
2. C. A. Rush, Hampton, S. C.
3. M. B. Monsen, Luray, S. C.
4. J. L. Folk, Brunson, S. C.
5. J. W. Colson, Varnville, S. C.
6. S. Smith, Garnett, S. C.

HORRY COUNTY MEDICAL SOCIETY.

President, A. D. Lewis; Vice-President, E. Norton; Secretary, H. H. Burroughs.
roughs.
Delegate—J. S. Dusenbury.

1. A. D. Lewis, Green Sea, S. C.
2. H. H. Burroughs, Conway, S. C.
3. Evan Norton, Conway, S. C.

MEMBERS—Continued.

4. Jas. A. Norton, Conway, S. C.
5. J. S. Dusenbury, Conway, S. C.
6. A. B. Walters, Gallivants Ferry, S. C.
7. E. A. Stalvey, Stalvey, S. C.
8. H. T. Kirby, Loris, S. C.
9. J. K. Stalvey, Bucksport, S. C.
10. W. E. McCord, (D D. S.), Conway, S. C.

KERSHAW COUNTY MEDICAL SOCIETY.

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Delegate—W. J. Burdell.

1. S. F. Brasington, Camden, S. C.
2. W. J. Burdell, Lugoff, S. C.
3. A. W. Burnett, Camden, S. C.
4. J. W. Corbett, Camden, S. C.
5. W. R. Clyburn, Camden, S. C.
6. W. J. Dunn, Camden, S. C.
7. J. T. Hay, Boykin, S. C.
8. W. D. Griggsby, Blaney, S. C.
9. A. A. Moore, Camden, S. C.
10. Sidney C. Zemp, Camden, S. C.

LAURENS COUNTY MEDICAL SOCIETY.

President, W. D. Ferguson; Vice-President, T. L. W. Bailey; Secretary, Jesse H. Teague; Treasurer, A. J. Christopher.
Delegates—W. D. Ferguson, T. L. W. Bailey.

1. J. D. Austin, Clinton, S. C.
2. S. F. Blakely, Ora, S. C.
3. H. K. Aiken, Laurens, S. C.
4. T. L. W. Bailey, Clinton, S. C.
5. A. J. Briggs, Clinton, S. C.
6. W. L. Bailey, Clinton, S. C.
7. J. W. Beason, Gray Court, S. C.
8. A. J. Christopher, Laurens, S. C.
9. J. W. Davis, Clinton, S. C.
10. W. H. Dial, Laurens, S. C.
11. J. L. Donnan, Laurens, S. C.
12. W. D. Ferguson, Laurens, S. C.
13. J. L. Fennell, Waterloo, S. C.
14. A. R. Fuller, Mountville, S. C.
15. E. E. Hughes, Laurens, S. C.
16. J. H. Miller, Cross Hill, S. C.
17. J. M. Owens, Cross Hill, S. C.
18. E. W. Pinson, Cross Hill, S. C.
19. T. J. Peake, Cross Hill, S. C.
20. C. L. Poole, Laurens, S. C.
21. C. E. Rogers, Gray Court, S. C.
22. C. A. Saxon, Clinton, S. C.
23. Jesse H. Teague, Laurens, S. C.
24. E. F. Taylor, Renno, S. C.
25. J. M. Wallace,
26. L. Schayer, Laurens, S. C.
27. J. P. Wilbur, Waterloo, S. C.
28. W. H. Young, Clinton, S. C.
29. J Lee Young, Clinton, S. C.
30. J. W. Young, Clinton, S. C.
31. J. R. Culbertson, Gray Court, S. C.
32. C. D. East, Goldville, S. C.

LEE COUNTY MEDICAL SOCIETY.

President, A. C. Baskins; Vice-President, Dr. Yellott; Secretary, R. O. McCutchen.
Delegate—L. H. Jennings.
Alternate—C. W. Harris.

1. L. H. Jennings, Bishopville, S. C.
2. A. C. Baskins, Bishopville, S. C.
3. C. W. Harris, Bishopville, S. C.
4. B. L. Harris, St. Charles, S. C.
5. Dr. Yellott, Lynchburg, S. C.
6. R. O. McCutchen, Bishopville, S. C.
7. R. L. McLeod, Bishopville, S. C.
8. Bush McLauchlin, Bishopville, S. C.
9. B. DuPre, Bishopville, S. C.

LEXINGTON COUNTY MEDICAL SOCIETY.

President, F. R. Geiger; Vice-President, R. E. Mathias; Secretary and Treasurer, J. J. Wingard.
Delegate—J. J. Wingard.
Board of Censors—R. H. Timmerman, H. G. Eleazer, J. P. Drafts.

1. L. C. Brooker, Gansea, S. C.
2. D. M. Crosson, Leesville, S. C.
3. J. P. Drafts, Barr, S. C.
4. H. G. Eleazer, Peak, S. C., R. F. D.
5. J. W. Eargle, Chapin, S. C., R. F. D.
6. F. R. Geiger, New Brookland, S. C.
7. J. W. Geiger, New Brookland, S. C., R. F. D.
8. D. R. Kneece, Pelion, S. C.
9. W. L. Kneece, Baxter, S. C.
10. J. R. Langford, Swansea, S. C.
11. R. E. Mathias, Irmo, S. C.
12. G. F. Roberts, Lexington, S. C.
13. Jos. L. Shulor, Selwood, S. C.
14. R. H. Timmerman, Batesburg, S. C.
15. W. P. Timmerman, Batesburg, S. C.
16. J. J. Wingard, Lexington, S. C.
17. E. P. Derrich, Lexington, S. C.
18. L. B. Etheridge, Leesville, S. C.
19. A. T. Haito, New Brookland, S. C.

MARLBORO COUNTY MEDICAL SOCIETY.

President, J. A. Faison; Vice-President, J. P. Bell; Secretary and Treasurer, J. H. Reese.
Delegate—Chas. D. Napier.

MEMBERS—Continued.

1. J. A. Faison, Bennettsville, S. C.
2. J. P. Bell, McColl, S. C.
3. J. H. Reese, Tatum, S. C.
4. Chas. D. Napier, Blenheim, S. C.
5. J. L. Napier, Blenheim, S. C.
6. L. B. Salters, Blenheim, S. C.
7. W. J. Crosland, Bennettsville, S. C.
8. J. F. Kinney, Bennettsville, S. C.
9. Chas. R. May, Bennettsville, S. C.
10. A. S. Townsend, Bennettsville, S. C.
11. Douglas Hamer, McColl, S. C.
12. J. C. Moore, McColl, S. C.
13. J. A. Woodley, Tatum, S. C.
14. W. M. Reedy, Clio, S. C.
15. J. A. Hamer, Clio, S. C.
16. C. S. Evans, Clio, S. C.

MARION COUNTY MEDICAL SOCIETY.

1. A. McIntyre, Marion, S. C.
2. E. Dibble, Marion, S. C.
3. Z. Smith, Marion, S. C.
4. A. M. Brailsford, Marion, S. C.
5. Z. M. Bardin, Marion, S. C.
6. E. L. Brown, Latta, S. C.
7. F. M. Carpenter, Latta, S. C.
8. C. S. Howell, Marion, S. C.
9. Taylor Lewis, Mullins, S. C.
10. E. C. Major, Latta, S. C.
11. J. C. Rogers, Pages Mill, S. C.
12. M. Smith, Pages Mill, S. C.
13. W. B. Smith, Little Rock, S. C.
14. F. A. Smith, Mullins, S. C.
15. E. B. Utley, Marion, S. C.
16. H. A. Edwards, Latta, S. C.

NEWBERRY COUNTY MEDICAL SOCIETY.

Secretary—Frank D. Mower.
Delegate—W. G. Houseal.
Alternate—W. E. Pelham.

1. J. M. Kibler, Newberry, S. C.
2. W. A. Dunn, Newberry, S. C.
3. W. G. Houseal, Newberry, S. C.
4. O. B. Mayer, Newberry, S. C.
5. F. D. Mower, Newberry, S. C.
6. W. E. Pelham, Newberry, S. C.
7. W. D. Senn, Newberry, S. C.
8. J. A. Meldau, Newberry, S. C.
9. J. W. M. Folk, Newberry, S. C.
10. Jno. J. Dominick, Prosperity, S. C.
11. J. S. Wheeler, Prosperity, S. C.
12. G. T. Hunter, Prosperity, S. C.
13. J. W. Sease, Little Mt., S. C.
14. C. T. Wyche, Prosperity, S. C.
15. J. I. Bedenbaugh, Prosperity, S. C.
16. T. H. Pope, Kinards, S. C.
17. E. H. Moore, Silver St., S. C.

OCONEE COUNTY MEDICAL SOCIETY.

President, W. R. Doyle; Vice-President, J. J. Thode; Secretary and Treasurer, W. A. Strickland.
Delegate—E. C. Doyle.
Alternate—C. M. Walker.
Board of Censors—E. A. Hines, J. W. Wickliffe, H. E. Rosser.

1. C. M. Walker, Westminster, S. C.
2. W. A. Strickland, Westminster, S. C.
3. E. A. Hines, Seneca, S. C.
4. H. E. Rosser, Westminster, S. C.
5. J. R. Heller, Fair Play, S. C.
6. J. S. Stribling, Seneca, S. C.
7. W. R. Doyle, Seneca, S. C.
8. J. W. Wickliffe, West Union, S. C.
9. B. F. Sloan, Walhalla, S. C.
10. J. W. Bell, Walhalla, S. C.
11. E. C. Doyle, Seneca, S. C.
12. A. M. Readfern, Clemson College, S. C.
13. J. J. Thode, Walhalla, S. C.

ORANGEBURG — CALHOUN COUNTY MEDICAL SOCIETY.

President, W. L. Pou; Vice-President, M. J. D. Dantzler; Secretary, C. L. Green; Treasurer, W. R. Bowman.
Delegates—L. C. Shecut, A. W. Browning.
Board of Censors—M. G. Salley, A. R. Able, A. W. Browning.

1. W. L. Pou, St. Matthews, S. C.
2. M. J. D. Dantzler, Elloree, S. C.
3. C. I. Green, Orangeburg, S. C.
4. W. R. Lowman, Orangeburg, S. C.
5. A. R. Able, St. Matthews, S. C.
6. T. H. Dreher, St. Matthews, S. C.
7. J. K. Fairy, St. Matthews, S. C.
8. L. B. Bates, St. Matthews, S. C.
9. T. H. Symmes, St. Matthews, S. C.
10. Sophia Brunson, Elloree, S. C.
11. A. W. Browning, Elloree, S. C.
12. J. T. Green, Elloree, S. C.
13. P. L. Felder, Elloree, S. C.
14. W. H. Lawton, Vances, S. C.
15. A. P. Traywick, Cameron, S. C.
16. G. W. Neville, Rowesville, S. C.
17. D. R. Sturkie, North, S. C., R. F. D.
18. T. C. Doyle, Orangeburg, S. C.
19. T. A. Jeffords, Orangeburg, S. C.
20. J. M. Oliver, Orangeburg, S. C.
21. L. K. Sturkie, Orangeburg, S. C.
22. L. C. Schecut, Orangeburg, S. C.
23. M. G. Salley, Orangeburg, S. C.
24. D. D. Salley, Orangeburg, S. C.
25. Geo. H. Walter, Orangeburg, S. C.
26. J. G. Wannamaker, Orangeburg, S. C.
27. J. T. Carter, Bowman, S. C.

MEMBERS—Continued.

PICKENS COUNTY MEDICAL SOCIETY.

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Delegate—W. A. Tripp.

1. W. M. Sheldon, Liberty, S. C.
2. W. A. Long, Liberty, S. C.
3. W. A. Woodruff, Cateechee, S. C.
4. L. G. Clayton, Central, S. C.
5. L. T. Shirley, Central, S. C.
6. Broxton R. Jewett, Central, S. C.
7. J. L. Bolt, Pickens, S. C.
8. J. L. Salley, Pickens, S. C.
9. L. F. Robinson, Pickens, S. C.
10. C. N. Wyatt, Easley, S. C.
11. E. F. Wyatt, Easley, S. C.
12. H. F. Russell, Easley, S. C.
13. R. J. Gilliland, Easley, S. C.
14. Milton L. Ponder, Dacusville, S. C.
15. J. E. Allgood, Liberty, S. C.
16. W. A. Tripp, Easley, S. C.
17. J. O. Rosamond, Easley, S. C., R. F. D.
18. E. B. Webb, Pickens, S. C.

SALUDA COUNTY MEDICAL SOCIETY.

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1. J. J. Kirsey, Saluda, S. C.
2. Oscar P. Wise, Saluda, S. C.
3. R. S. Bush, Eulala, S. C.
4. S. M. Pitts, Chappells, S. C.
5. D. B. Frontis, Ridge Springs, S. C.
6. F. G. Asbill, Ridge Springs, S. C.
7. L. J. Smith, Ridge Springs, S. C.
8. P. A. Brunson, Ridge Springs, S. C.
9. J. D. Waters, Coleman, S. C.

SPARTANBURG COUNTY MEDICAL SOCIETY.

President, A. R. Fike; Vice-President, W. A. Smith; Secretary, L. Rosa H. Gantt; Treasurer, W. H. Chapman.
Delegates—W. P. Coan, J. H. Allen, Geo. E Thompson.
Censors—J. L. Jeffries, A. D. Cudd, W. L. Kirkpatrick.

1. J. N. Allen, Spartanburg, S. C.
2. A. M. Allen, Spartanburg, S C., R. F. D. No. 4.
3. J. W. Allen, Enoree, S. C.
4. H. R. Black, Spartanburg, S. C.
5. L. J. Blake, Spartanburg, S. C.
6. S. F. Blakely, Spartanburg, S. C.
7. W. W. Boyd, Spartanburg, S. C.
8. J. R. Brown, Spartanburg, S. C.
9. G. A. Bunch, Spartanburg, S. C.
10. W. H. Chapman, Spartanburg, S. C., R. F. D. No. 1.
11. W. J. Chapman, Inman, S. C.
12. Wm. F. Coan, Spartanburg, S. C., R. F. D. No. 5.
13. A. D. Cudd, Spartanburg, S. C.
14. Geo. R. Dean, Spartanburg, S. C.
15. J. P. DuPre, Converse, S. C.
16. J. Ed. Edwards, Spartanburg, S. C.
17. L. Rosa H. Gantt, Spartanburg, S. C.
18. J. R. Gibson, Inman, S. C.
19. Geo. W. Heintish, Spartanburg, S. C.
20. James H. Hunter, Spartanburg, S. C.
21. W. L. Kelly, Moore, S. C., R. F. D.
22. W. L. Kirkpatrick, Pacolet, S. C.
23. S. T. D. Lancaster, Pauline, S. C.
24. W. B. Lancaster, Spartanburg, S. C.
25. W. F. Leonard, Reidville, S. C.
26. O. W. Leonard, Spartanburg, S. C.
27. J. J. Lindsay, Spartanburg, S. C.
28. W. B. Lyles, Spartanburg, S. C.
29. D. R. Norman, Fairforest, S. C.
30. J. D. Orr, Spartanburg, S. C.
31. W. W. Painter, Cherokee, S. C., R. F. D. No. 1.
32. W. B. Patton, Cross Anchor, S. C.
33. E. O. Posey, Woodruff, S. C.
34. E. L. Potts, Spartanburg, S. C.
35. W. G. Sexton, Spartanburg, S. C.
36. A. C. Smith, Glenn Springs, S. C.
37. D. L. Smith, Spartanburg, S. C.
38. W. A. Smith, Glendale, S. C.
39. James R. Sparkman, Spartanburg, S. C.
40. B. B. Steedly, Spartanburg, S. C.
41. J. L. Jefferies, Spartanburg, S. C.
42. H. B. Tate, Pacolet, S. C.
43. S. J. Taylor, Clifton, S. C.
44. Geo. E. Thompson, Inman, S. C., R. F. D.
45. R. E. Thompson, Inman, S. C., R. F. D.
46. J. O. Vernon, Wellford, S. C.
47. W. A. Wallace, Spartanburg, S. C.
48. S. A. Wideman, Woodruff, S. C.
49. H. H. Workman, Woodruff, S. C.
50. J. F. Williams, Roebuck, S. C.
51. G. DeFoix Wilson, Spartanburg, S. C.
52. A. R. Fike, Spartanburg, S. C.

SUMTER COUNTY MEDICAL SOCIETY.

President, F. K. Holman; Vice-President, H. A. Mood; Secretary and Treasurer, E. R. Wilson.
Delegate—H. M. Stuckey.

MEMBERS—Continued.

1. Archie China, Sumter, S. C.
2. S. C. Baker, Sumter, S. C.
3. Walter Cheyne, Sumter, S. C.
4. H. M. Stuckey, Sumter, S. C.
5. J. A. Mood, Sumter, S. C.
6. H. A. Mood, Sumter, S. C.
7. F M. Dwight, Sumter, S. C.
8. L. M. Parler, Sumter, S. C.
9. M. S. Kirk, Sumter, S. C.
10. J. C. Spann, (Honorary), Sumter, S. C.
11. Richard Furman, Sumter, S. C.
12. E. R. Wilson, Sumter, S. C.
13. E. F. Green, Sumter, S. C.
14. C. J. Lemmon, Sumter, S. C.
15. W. E. Mills, Sumter, S. C.
16. F. K. Holman, Sumter, S. C.

UNION COUNTY MEDICAL SOCIETY.

President, Theo Maddox; Secretary, R. R. Berry.
Delegate—S. G. Sarratt.

1. Theo Maddox, Union, S. C.
2. R. R. Berry, Union, S. C.
3. S. G. Sarratt, Union, S. C.
4. D. H. Montgomery, Union, S. C.
5. Crown Torrence, Union, S. C.
6. M. W. Culp, Union, S. C.
7. J. G. Going, Union, S. C.
8. J. H. Hamilton, Union, S. C.
9. J. T. Jeter, Santuc, S. C.
10. G. F. Mosely, Cross Keys, S. C.
11. O. L. P. Jackson, Union, S. C.

WILLIAMSBURG COUNTY MEDICAL SOCIETY.

President, W. H. Woods; Vice-President, T. B. Hinnant; Secretary and Treasurer, E. T. Kelly.
Delegate—C. D. Rollins.
Censors—W. S. Lynch, R. I. Moore.

1. J. B. Hinnant, Lake City, S. C.
2. W. L. Whitehead, Lake City, S. C.
3. S. B. W. Courteney, Lake City, S. C.
4. W. H. Woods, Lake City, S. C.
5. C. D. Rollins, Lake City, S. C.
6. J. D. Eaddy, Lake City, S. C.
7. J. D. Whitehead, Lake City, S. C.
8. R. I. Moore, Olanto, S. C.
9. W. H. Lynch, Scranton, S. C.
10. W. L. Wallace, Kingstree, S. C.
11. W. G. Gamble, Kingstree, S. C.
12. D. C. Scott, Kingstree, S. C.
13. C. D. Jacobs, Kingstree, S. C.
14. E. T. Kelly, Kingstree, S. C.
15. F. N. Boyd, Salters Depot, S. C.
16. W. H. Boyd, Salters Depot, S. C.
17. J. H. Pratt, Morrisville, S. C.
18. C. H. Pate, Scranton, S. C.
19. L. B. Johnson, Rome, S. C.
20. W. D. Rich, Gourdins, S. C.

YORK COUNTY MEDICAL SOCIETY.

President, W. W. Fennell; Vice-President, W. A. Hood; Secretary and Treasurer, Jno. I. Barron.
Delegates—E. W. Pressley, J. E. Massey.
Alternates—J. A. Bagger, M. J. Walker.

1. W. W. Fennell, Rock Hill, S. C.
2. W. A. Hood, Hickory Grove, S. C.
3. I. A. Bigger, Rock Hill, S. C.
4. R. A. Bratton, Yorkville, S. C.
5. T. A. Crawford, Rock Hill, S. C.
6. J. W. Campbell, Clover, S. C.
7. J. D. McDowell, Yorkville, S. C.
8. T. N. Dulin, Clover, S. C.
9. E. W. Pressley, Clover, S. C.
10. C. C. Leech, Hickory Grove, S. C.
11. W. M. Love, McConnellsville, S. C.
12. J. H. Saye, Sharon, S. C.
13. B. N. Miller, Smyrna, S. C.
14. M. B. Younge, Rock Hill, S. C.
15. J. R. Miller, Rock Hill, S. C.
16. M. J. Walker, Yorkville, S. C.
17. J. I. Barron, Yorkville, S. C.
18. W. L. Hart, Yorkville, S. C.
19. I. J. Campbell, Clover, S. C.
20. M. B. Nell, Clover, S. C.
21. J. E. Massey, Jr., Rock Hill, S. C.
22. C. O. Burruss, Sharon, S. C.
23. W. G. Stevens, Rock Hill, S. C.
24. T. B. Keel, Yorkville, S. C.

PHYSICIANS NOT MEMBERS OF THE MEDICAL SOCIETY.

Aiken County.

1. J. T. Baker, Langley, S. C.
2. W. S. Eubanks, Talatha, S. C.
3. P. H. Eve, Beach Island, S. C.
4. J. I. Green, Bath, S. C.
5. R. H. Golflin, Augusta, S. C., R. F. D.
6. M. M. LeCroy, Warrenville, S. C.
7. H. A. Odom, Springfield, S. C.
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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. J. C. SOSNOWSKI, Editor.

VOL. VI. SEPTEMBER, 1910. No. 9

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

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JOURNAL S. C., MED. ASS'N., CHARLESTON, S. C.

THE PREVALENCE OF PELLAGRA.*

By J. W. Babcock,

(Physician and Superintendent, State Hospital for the Insane, Columbia, S. C.)

Grateful acknowledgment is made to officers of the U. S. P. H. and M. H. Service, and to assistants in the Library, S. G. O., Army Medical Museum, Washington, D. C., for many courtesies and valuable aid while preparing this paper.)

At the last meeting of this Association a collaborated report (1) was presented upon the known and estimated statistics of pellagra in this country. At the request of your committee on programme, I renew and amplify the topic to-day. Unfortunately, I must still speak from the asylum point of view, reliable statistics from the general population not yet being available from many States.

*Read before Am. Med. Psycholog. Assoc., Washington, D. C., May 5, 1910.

Prevalence.

In the previous paper it was stated that 1,000 cases of pellagra had been reported from thirteen States, more than half being in insane asylums and similar institutions. These cases were, for the most part, in the South Atlantic and Gulf States, and a conservative estimate was given of the occurrence of 1,500 cases in the Southern States in the three preceding years. When our manuscript went to press in the early fall the number of States in which pellagra had been reported had reached sixteen, two interesting foci of the disease having been discovered in Illinois in July and August at the Cook County and Bartonville Hospitals, respectively.

In December, 1909, records were at hand of the existence of pellagra in twenty-six States. A few cases of the disease had been diagnosed or suspected in Massachusetts, New York, New Jersey, Pennsylvania, Maryland, Oklahoma, Arkansas, Kentucky, Iowa, Kansas, California, Ohio, New Mexico and Colorado. Some of these were "imported."

While in the following States pellagra had been recognized as present in more formidable proportions among natives and residents, more especially in insane asylums—Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, Tennessee and Illinois.

To these we may now add Vermont and Missouri.

Since this paper was read single cases of pellagra have been reported from Rhode Island, West Virginia and the District of Columbia; and record may now be entered of the discovery of another interesting focus of the disease recently made at the Philadelphia Hospital for the Insane, ("Blockley").

PELLAGRA IN THE UNITED STATES.

STATES.	CASES.
1. Massachuetts	3
2. New York	3
3. New Jersey (imported)	1
4. Pennsylvania	33
5. Maryland	7
6. Virginia	100-300
7. North Carolina	200
8. South Carolina	500
9. Georgia	670
10. Florida	50
11. Alabama	330
12. Mississippi	188
13. Louisiana	500 (?)
14. Texas	100
15. Oklahoma	1
16. Arkansas	1
17. Tennessee	51
18. Kentucky	5
19. Illinois	250
20. Iowa	2
21. Kansas	2
22. California	7
23. Indiana	1 (?)
24. Ohio	1
25. New Mexico	2
26. Colorado	1 (?)
27. Missouri	3
28. Vermont	1
29. Rhode Island	1
30. West Virginia	1
31. District of Columbia	1

This table indicates that pellagra exists, or is suspected, in 30 States and the District of Columbia, and that the number of cases approximates 3,000. Some of the figures are based upon actual cases and others upon general estimates. While some estimates seem large, nearly all are made by health officers, or physicians, who have had experience with both statistics and pellagra, so that upon the whole the sum total may, as was claimed for the estimates last year, be considered as conservative. That 5,000 cases of pellagra have occurred in the United States in the last five years is probably true.

NORTH CAROLINA—"There is satisfactory proof that at least one case of pellagra occurred in this State as far back as 1889. There are definite records of 200 cases in North Carolina. It is difficult to estimate how many cases occurred in the State as a whole. It is certain that only a small portion have been recognized. It is no unusual thing for us to find, in running down one case, four or five more very mild cases in the same house." (2.)

ALABAMA—(Dr. J. T. Searcy.) Pellagra statistics in asylums up to December, 1909:

The Bryce Hospital since 1896:

White men	6
White women	21
Total	27
Deaths	18

Mt. Vernon (Colored) Hospital since 1896:

Negro men	66
Negro women	144
Total	216
Deaths	121

Average number of white patients....1,350
" " " colored " 650

A press report based upon records of the Alabama Board of Health states: Fifty-five persons (21 white and 34 negroes) died of pellagra from January 1, 1909, to October 1, 1909, and 38 cases were still under observation.

South Carolina—"The disease has been recognized in Charleston since March, 1908, but it is a very general opinion among the local physicians there that pellagra has existed in that city for twenty years or more under other diagnoses. Nineteen cases—white males, 6; colored males, 3; colored females, 10—have been recognized. Ten have died. The death rate in insane cases was especially high." (3.)

I will pass among you two maps, showing the local origin of 137 cases of pellagra admitted to the South Carolina State Hospital from January 1, 1908, to November 1, 1909. (About 12 per cent. of the total admissions.) In the State Hospital last year out of 605 admissions, 92, or 15 per cent., had pellagra on admission, and there were 68 deaths from the disease. The other map is based upon reports to the secretary of the State Board of Health from physicians upon pellagra throughout the State.

The most striking feature about these two maps is the greater prevalence of the disease, just as has been suspected, above the "fall line," or in the upper part of the State.

Louisiana—"The number of cases of pellagra in the State positively diagnosed is about 75, of which 85 per cent. are in State institutions." (4.)

Vermont—A press dispatch under date of April 17, 1910, reports what is said to be the first case of pellagra in Vermont, in a woman, at the Fanny Allen Hospital, at Burlington.

Pennsylvania—Passed Assistant Surgeon John D. Long, U. S. P. H. and M. H. Service, tells me that about June 1, 1910, in consultation with the medical officers of the Philadelphia Hospital for the Insane ("Blockley") he saw in that institution nine cases of pellagra and sixteen suspects.

Rhode Island—A dispatch dated July 12th announces the death at the State Alms House at Providence of the first case of pellagra in the State, a man 55 years old.

Cuba—"It has been taken for granted that pellagra does not exist in Cuba, but Dr. Manuel Bango says very rarely cases have been imported from the Austrias, and occasionally a tentative diagnosis has been made in natives or residents, usually alcoholists or sufferers with sprue." (5.)

Such are some of the current reports and comments about the prevalence of pellagra. They could easily be multiplied.

The general attitude of the American medical mind towards the possible existence of pellagra in this country is well illustrated by the fact that one of our highest authorities on diagnosis a few years ago, while on a visit in South Carolina, after carefully studying a typical pellagrin, rendered the opinion to his equally puzzled fellow-consultants that it was a case of "glossitis." This incident may soothe our profesional conscience somewhat, but it does not excuse us. I know that I should have made the diagnosis of pellagra in South Carolina nearly nineteen years ago. If pellagra and beriberi have admittedly occurred in our asylums, sporadically or endemically, shall we not learn a lesson therefrom and hereafter be on the alert for other so-called tropical diseases?

Neither the occasion nor space permit consideration of foreign statistics, however interesting and instructive they may be. But briefly, it may be noted that,

according to the circular recently issued by the British pellagra investigation committee: "In certain countries within the Mediterranean regions, such as Spain, Italy and Roumania, pellagra is looked upon as a veritable calamity. For Italy a yearly estimate of from 50,000 to 60,000 standing cases is no exaggeration; while Roumania, with a population of 5,300,000, is estimated to have from 40,000 to 50,000 cases." When we recall that according to different authorities from 4 to 10 per cent. of pellagrins become insane, we can understand the significance of these figures to alienists as well as to sanitarians and publicists.

The evidence is accumulating that pellagra has probably existed in this country since the "big war," at least Gray and Tyler went on record with reports of cases in 1864—and it is worth recalling that it was at a meeting of this Association in this city—and there is reason to believe that the disease was prevalent at the same time in the Andersonville, Ga., prison. Dr. Wm. W. Kerr, of Corsicana, Texas, an assistant surgeon of the prison, is my authority for the statement. A former assistant physician in the South Carolina Asylum, Dr. H. N. Sloan, says the disease was recognized and called pellagra there in the early 70's, but I have found no printed or written record of it. Dr. J. L. Thompson, for many years assistant physician, as well as old attendants, in the same hospital, are now satisfied that they can trace the disease back to the early 80's. As stated above, Charleston physicians now admit the occurrence of pellagra in their city twenty years or more ago. In addition to the early cases mentioned in the paper last year, I have learned from Dr. C. C. Bass that Dr. Bemis, of New Orleans, left a written diagnosis of a case in the Charity Hospital in 1889. Dr. Isadore Dyer, of New Orleans, had a case diagnosed as pellagra, and referred to him for treatment by an Alabama physician six months before Dr. G. H. Searcy observed the disease. So we may conclude that isolated cases of pellagra, native and imported, have probably occurred in general practice, and especially in asylum and hospitals, for the last half-century, although the diagnosis may not always have been correctly made. But after granting the occurrence of sporadic cases for a long time we must admit that we are now passing through a serious epidemic of pellagra.

A phase of the psychology of the problem has been the failure of the profession to recognize pellagra, if it has heretofore been prevalent in anything like its present proportions. The explanation of, or the responsibility for this oversight, rests largely with the authors of English and American textbooks, of both general practice and insanity, who have told us, if they told us anything at all about it, that pellagra is an Italian disease that does not occur in our country. (6.) But in 1882 Van Harlingen (7) announced that the disease was likely to occur in the United States at any time.

So careful an authority as Surgeon Rupert Blue, of the U. S. P. H. and M. H. Service, states that he is of the opinion that pellagra can be found to-day in nearly all of the insane asylums and alms houses of this country." (8.)

It is my impression that the discovery of the existence of pellagra in their institutions is not welcomed by some asylum officers. Recently while visiting such a hospital in which the disease had not yet been recognized, I saw and called attention to an unmistakable case, but I was not invited to extend my observations.

This statement is probably too sweeping, but it serves to indicate how important it is that accurate statistics should be secured at an early date.

Less than two and one-half years ago pellagra was but a shadow of a name to most of us. The increasing number of States reporting the disease and the figures quoted above, indicate, to some extent, how common in some communities as well as how widely disseminated the disease is, and probably has been for

some years, in the United States. By asylum officers—shall I say in the South only?—pellagra is now becoming recognized as of great importance as a cause of insanity.

It is to emphazise the above facts that I have, after hesitation, undertaken, on rather short notice, again to present the topic of pellagra before you.

Conclusions—It is now established that pellagra in the United States extends from the Atlantic to the Pacific, and from the Great Lakes to the Gulf of Mexico. The disease is, therefore, no longer merely of academic interest to the American physician, be he alienist or neurologist, dermatologist or general practitioner.

It is probable that pellagra has occurred sporadically in this country for forty or fifty years, but it is certain that for the last three or four years it has appeared in epidemic form.

Numerically its prevalance cannot be accurately or even approximately stated, but its wide geographical distribution emphasizes the need of vigorous, intelligent investigation into its causation, prevention and treatment on the part not only of the medical profession but also by both State and Federal Governments.

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THE HAEMOLYTIC REACTION, IN THE DIAGNOSIS OF SYPHILIS.*

By Francis B. Johnson, M. D., Charleston, S. C.

Etymologically the term haemolysis includes destruction or solution of both red and white blood corpuscles, but by common usage the solution of the erythrocytes alone is understood. Essentially the phenomenon consists in the escape of the haemoglobin into the surrounding fluid. It is not known exactly in what way the stroma holds the haemoglobin normally; whether purely physically or in part chemically, and it is also not yet fully solved whether the stroma consists of spongioplasm or a sac like membrane.

To understand the use of this reaction as an aid in the diagnosis of syphilis one must first have a clear idea of what haemolytic and bacteriolytic systems consist of.

For haemolysis to take place by the use of serums three substances are necessary—red blood corpuscles, amboceptor and complement—these three taken together form what is known as the haemolytic system.

The red blood corpuscles: For example, take sheep's blood or human blood. This obtained, is deprived of its fibrin while fresh, and the cells washed in normal salt solution, then an emulsion

*Read before the South Carolina Medical Society, June 15, 1910.

of these cells made up to a known strength in normal salt solution.

The second reagent required is amboceptor. If some of the above emulsion is injected into a rabbit for three or four successive doses at intervals of five days, at the end of this time the rabbit's serum will be found to have acquired the property of dissolving out the haemoglobin when mixed with an emulsion of red cells of either sheep or man, depending on which was used for injection.

Complement: Now if this above serum be heated to 56° C. for one-half hour it loses this property and is said to be inactivated, but if a little fresh serum, say that from a Guinea pig, be added to the mixture of red blood corpuscles and inactivated serum, haemolysis will take place. This shows that the rabbit's serum contains two substances that are necessary for haemolysis to take place, one being called amboceptor or haemolysin,—is thermostable, the other, found normally in all sera and destroyable by heat, is called complement. Complement alone added to an emulsion of red cells will not produce haemolysis. It has been found that the serum derived from a Guinea pig is very rich in complement, the strength being quite constant, while in other sera the amount is found to vary considerably, therefore in all haemolytic work it is best to use the fresh serum of a Guinea pig to furnish complement.

All biological excitors of disease are known as antigens. When antigens enter the system there are produced in the blood serum of that person substances known as antibodies. Antigens, antibodies and complement have the power of forming some sort of union similar to that in haemolysis. This is known as bacteriolysis, because in some instances the bacteria or antigens are dissolved.

Here we have two systems with one substance in common required in both to complete either reaction, this is the complement. Hence if we have a known antigen, as an extract from a syphilitic liver of a foetus which is rich in spirochaeta pallida, a serum that we suspect clinically to contain antibodies to syphilis, and complement derived from some other source, mixed together, the complement becomes absorbed in the reaction, if there really prove to be antibodies in the suspected serum. Now, if to this mixture we add red blood cells and amboceptor, haemolysis will not take place, because no free complement is left to complete the reaction. On the other hand if no syphilitic antibodies are present in the suspected serum, the bacteriolytic reaction will not take place and the complement will still be free, so that the addition of red cells and amboceptor haemolysis will take place. It can thus be seen how the terms "absorption," "fixation," or "deviation" of complement are given to this reaction.

This phenomenon was first demonstrated by Bordet and Gengou. Wassermann was the first to adopt this method to the diagnosis of syphilis.

The antigen derived from a syphilitic liver was at first thought to be of a specific nature, but later it was discovered that extracts from livers, other organs and cancers from non-syphilitics acted in a similar manner, thus destroying this hypothesis. It has been found that the active substance belonged in the lipoid group. Different members of this group have been tried as antigen, among which may be mentioned lecithin, cholestrin, the sodium salts of the bile acids, sodium oleate and oleic acid. None of these either alone or in combination, give as satisfactory results as the total extracts of organs, and of these the extract of a syphilitic liver can be used in the smallest quantity and with more certain results.

In the Wassermann system the following substances are used:

1. Washed sheep's red blood corpuscles made into an emulsion of 5 per cent. normal salt solution. 1 c. c.

2. Amboceptor, rabbit's serum immunized against sheep's red blood corpuscles and inactivated to destroy the complement. This has to be tested out

to find the exact amount required to haemolyse 1 c. c. of a 5 per cent. emulsion of red cells, using 0.1 c. c. of complement derived from the blood of a Guinea pig. This is known as one unit. The amboceptor, if kept in a cool place and sterile, will maintain this property for a considerable length of time. Two units are used.

3. Complement obtained from the blood of a Guinea pig by allowing the blood to clot, the serum is drawn off and used. This will only keep stable for a few days. 0.1 c. c. is used.

4. Antigen used is a watery or an alcoholic extract derived from a syphilitic foetal liver. The watery extract is very unstable and does not keep for many days. When the alcoholic extract is used, it is diluted in the proportion of one part to four parts normal salt solution. .1 c. c. is used.

5. Suspected syphilitic serum that has been inactivated, that is, deprived of its complement by heating to 56° C. for one-half hour. The quantity used is 0.2 c. c.

The serum for diagnosis and the complement are placed in one tube, this is known as the control tube; in another tube is placed the serum for diagnosis, the complement and the antigen; this is called the determination tube. In two other sets of tubes are placed in a similar way the serum of a known syphilitic and that of a person known not to have syphilis. Finally as a control to the haemolytic system a set of tubes with no human serum is used, one with complement alone, the other with complement and antigen. These tubes are now placed in an incubator and kept there for one hour, taken out and the emulsion of blood cells and amboceptor added, and again incubated for two hours, when the results can usually be read; the final reading, however, should not be made until the tubes have stood in a refrigerator for twelve hours or more.

The reading should be as follows: All control tubes, including the haemolytic system control tubes and the non-syphilitic determination tube, should all show complete haemolysis; that is the contents of the tubes will be a clear light red and there will be no deposit in the bottom of the tubes or red cells. The known syphilitic determination tube should show no haemolysis; the fluid will be light in color and the red cells will all be seen settled in the bottom of the tube. Unless all control tubes work accurately one is not justified in rendering an opinion on the serum for diagnosis. The suspected serum determination tube will show no haemolysis if that serum really contains syphilitic antibodies, and will mean a positive reaction and syphilis. On the other hand, if the suspected serum contain no syphilitic antibodies haemolysis will take place in the determination tube, meaning a negative reaction and no syphilis.

Noguchi has added to the simplification of this method by using human red blood cells and human amboceptor and reducing the quantities of reagents required.

The Noguchi method is as follows:

1. Emulsion of 1 per cent. washed human red blood corpuscles in normal salt solution. 1 c. c. of this is used.

2. Amboceptor, obtained by inoculating a rabbit with human red cells, obtaining the serum, inactivating and testing strength in a similar way as in the Wassermann method. Two units are used. One unit representing the amount that will haemolyse 1 c. c. of the above emulsion, using 0.04 c. c. of complement. ment.

3. Complement, derived from a Guinea pig, 0.04 c. c., or 0.1 c. c. of a 40 per cent. solution.

4. Antigen, the alcoholic extract of a syphilitic liver. 0.02 c. c., or one capillary drop usually.

5. Suspected serum for diagnosis, 0.02 c. c., or one capillary drop. According to Noguchi it is not necessary to inactivate, because in the small quantity of serum used the contained complement is practically *nil,* and does not interfere

with the reaction. When using inactivated serum 0.08 c. c. is required.

Dr. Homer F. Swift, to whom I am indebted for many courtesies in showing me how these reactions are performed, claims that without inactivating the serum, reactions are obtained in some few cases not syphilitic and that do not react to the original Wassermann method or when the Noguchi method is used with inactivated serum.

In the Noguchi method the tubes are set up in the same way as in the Wassermann, together with all controls needed, only the red cells are added previous to the first incubation; after incubating for an hour the human amboceptor is added, and after incubating for two more hours placed in a refrigerator, final readings made about twelve hours later.

Dr. Noguchi has still further simplified his method by drying the amboceptor and antigen on filter paper. The papers are cut into sizes containing an accurate amount of reagents needed for each test. The papers being put in the tubes just as you would do with the liquid reagents. These, however, do not give quite as much satisfaction in reading results as the liquids, and deteriorate quicker, especially the antigen.

"The clinical value of haemolysis is, as in all diagnostic tests which depend upon the interaction of obscure substances of biological origin, commensurate with an intelligent appreciation of its possibilities and limitations. Great harm in the past has been done to the usefulness of many new methods of diagnosis by those who did not trouble themselves to become properly acquainted with the question."

The results obtained by many investigators coincide very closely; the few number of positive results obtained where syphilis could be practically excluded does little to lessen the value of the reaction in syphilis.

From a series of cases, 1,714 in number, arranged from tables given by Nuguchi, Swift and Fox, the following comparative results are shown in regard to the Wassermann and Noguchi methods, and in the different stages and varieties of syphilis. (Table 1.)

	No. of Cases	Noguchi Nog. P. C.	Noguchi Wass. P. C.	Swift Nog. P. C.	Swift Wass. P. C.	Fox Nog. P. C.	Fox Wass. P. C.	Totals Nog. P. C.	Totals Wass. P. C.
Primary syphilis	93	92.8	66.6	81	81	100	100	91.2	82.5
Secondary syphilis	310	96	86.6	97	92	100	97	97.6	91.8
Tertiary syphilis	254	89.9	72.5	88	80	84	71	87.3	74.5
Early latent syphilis	115	75.6	48.1					75.6	48.1
Late latent syphilis	150	79.3	44.7					79.3	44.7
Prolonged treatment	39	10.2						10.2	
Cerebral syphilis	5	60						60	
Tabes	166	68	40.9	68	55	100	100	78.6	65.3
General Paralysis	18	86.6		100	67			93.3	67
Hereditary syphilis	6	100		100	100			100	100
Spinal syphilis	2		50						50
Cerebral endarteritis	2		100						100
Suspected syphilis	135	34.8	41.2			49	39	41.9	40.1
Other diseases	335	3.7	3.6					3.7	
Leprosy	13	70		66				68	
Scarlet fever	71	1.6		37		12		19.3	12

Among other diseases in which a positive reaction has been obtained in a very few instances are: Carcinoma, Banti's disease, muscular dystrophy, arthritis deformans, sarcoma, hydrophobia, malaria, framboesia, tuberculosis and probably several others. But in many of these instances extracts other than those from syphilitic organs were used, and in some instances syphilis could not be positively excluded. The results show that the Noguchi modification is in 5 to 20 per cent. of these cases more delicate. By some investigators it is considered too delicate, as many of the cases reporting positive findings and not syphilis were by the Noguchi method.

From reviewing the table it will be seen that secondary syphilis gives the highest number of positive reactions,

97.6 per cent. by the Noguchi method, 91.8 per cent. by the Wassermann; that primary syphilis comes next with 91.6 per cent by the Noguchi and 82.5 per cent. by the Wasserman; tertiary syphilis occupying third place. The marked evidence that prolonged treatment has, is shown in that only 10.2 per cent. of these cases give a positive result, changing the control of treatment of syphilis from uncertainty of results to something more definite as to prognosis. When the reaction does not disappear after prolonged treatment, Swift says: "The prognosis is probably bad and such cases may be expected to go on to general paralysis or tabes. A persistent negative reaction is a good prognostic sign; a returning reaction is a warning that a relapse is imminent and sufficient indication for renewed treatment."

It is also to be noticed that in heriditary syphilis and those types showing especially nervous manifestations, as tabes and general paralysis, the number of positive reactions is very high. In nervous diseases especially will such a method as this be appreciated, which will enable one to state positively whether or not a suspicion of syphilis is justified, or whether every thought of syphilis may be elminated from a given case. "Just such a service as this," says Sacks, "has the complement fixation test of Wassermann promised to render. I am certain that within recent years no aid to diagnosis has been given that can equal it in value and importance."

So far my own examinations in cases for diagnosis have not been enough to tabulate for comparison, but I shall mention some cases on which I have made the reactions that show the practicability of the test and the general usefulness of the same.

In three cases in which the diagnosis of brain tumor, possibly gumma, was made, the reaction proved positive in two.

Two patients, both having had sores on penis. In one a diagnosis of chancre made by one physician and by another he was told it was not a chancre; took no specific treatment and developed no secondaries. Later married, and because of frequent abortions of wife, was suspected of being syphilitic. Negative reaction. The other patient had been told he had a chancroid. While in Cuba some years later developed a rash on body, a physician there told him he had syphilis. Went to New York and was told there the rash was due to some intestinal toxaemia. Recently married and started to worry whether he had syphilis or not. Reaction was negative.

A man with some ulceration in throat, suspicious though not positive history of syphilis. Reaction positive.

A woman, rather suddenly seized with a severe headache, lasting several days and followed by complete left occular paralysis, diplopia and dimness of vision. An examination of the retina showed some obstruction to the circulation, probable endarteritis. No positive history could be obtained of syphilis, though suspected. The reaction proved positive.

Man with sore on penis; looked very much like a chancre, but with history of it appearing inside of a week after intercourse. Spirocheatae pallidae were found, and ulcer healed up; three weeks later made a Noguchi on him. It was positive and next week a secondary rash appeared on him.

Conclusions.

1. The Wassermann and Noguchi reactions are fairly definite diagnostic measures. A positive reaction practically always means syphilis. Negative findings give only presumptive evidence of the absence of syphilis.

2. The use of alcoholic extract of syphilitic liver as antigen gives best results and tends to avoid positive findings in non-syphilitics.

3. The Noguchi method is more readily applied, but sometimes seems to be too delicate, especially when using

liquid antigen. Inactivating the serum gives results corresponding more accurately with the Wassermann.

4. The finding in a few instances of the reaction in other diseases, with the exception of leprosy and scarlatina, is so seldom as not to cause confusion or lessen the value of the reaction. In these exceptions mentioned the other symptoms will differentiate.

5. The Wassermann and Noguchi reactions offer a good guide as to the effect of treatment and as to prognosis.

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A PLEA FOR MEDICAL INSPECTION OF SCHOOL CHILDREN IN SOUTH CAROLINA—REPORT OF THE WORK AT SENECA.*

By E. A. Hines, Seneca, S. C.

The title of my paper should really be the "Medical Inspection of Schools," for such will be the theme for my remarks. The attitude of the profession in this country in the past has been one of neglect of the interests of the school child. The idea has probably prevailed that in such a free country parental rights should be left untrammelled. The mental side of school life has always assumed the role of first importance, the moral occupying second place, the physical last. These several relationships have been sadly disproportioned to the detriment of the fullest development of the race. We, in America, have never been slow to follow where others have lead in progressive learning, and ofttimes have been leaders ourselves. This has been notably true in certain departments of medicine and surgery. In preventive medicine, however, we have not sought until recent times to measure up to the standard set by many other nations. This has been especially the case in regard to the medical inspection of schools. That the medical profession should be the first to blaze the way in the vast wilderness of ignorance which surrounds the child from birth is clear. Pedagogues, as a rule, are willing to acknowledge and follow the light, but the community at large in many instances presents an almost insuperable barrier. The latter can only be overcome by organized effort and an aggressive policy. It is with this

*Read at Laurens, S. C., April 20, 1910.

conviction that I present this subject for your consideration.

So far as I am aware medical inspection of schools with its hygienic problems had never been mentioned in the deliberations of this body prior to my paper setting forth a modified plan in 1908. Subsequent investigation reveals the apparent fact that medical inspection had hitherto not been carried out anywhere in the entire Southern States. Medical inspection of schools is not old in any country, as we reckon time in medical language—scarce a quarter of a century, Germany claiming the honor for leadership. Our own country has not been entirely negligent of all effort, for Boston in 1894 established a system of medical inspection which has gone forward until to-day she has possibly the most far-reaching system in the world. Many other cities of the North and Northwest have entered enthusiastically upon the work since 1894, but we of the South have lagged behind. South Carolina has always been in the forefront of progress in many avenues of human endeavor, but to keep her reputation untarnished in medical progress she must look to the conservation of her school interests in all that makes for the complete development of her citizenship.

We hear much to-day about the conservation of our national resources. The school child is the greatest asset the nation has, and as such we can turn our attention to no more potent force for the nation's good. That the function of the physician should not cease with the birth of the child is conceded; that it has done so in many instances is conclusive, and that the oversight of the child's environment and the child itself through school life has been neglected by the profession at large is undoubted. Childhood is where the foundation should be laid broad and firm or else the superstructure will fall short of the development which should follow. This is the most opportune moment I believe in which to launch a State-wide movement for the hygiene of the school child.

The great American Medical Association, after years of patient investigation of the American school child completed its masterly report at Atlantic City less than a year ago. If one of the greatest medical bodies in the world considers the subject of such importance it behooves us to assume a receptive attitude and be guided by a similar inspiration. I repeat, this is the opportune moment, for our attention in South Carolina has been focussed on educational matters in the last five years as never before. Indeed, the last General Assembly has been termed "an Educational Legislature." That body suggested the commission of five of our ablest citizens to look into the laws regulating our educational interests and report back to the next session of the Assembly such measures as would increase the efficiency of our educational machinery. It is safe to assert that if the medical profession embraces this opportunity as it should, this commission will go on record as favoring legislation for the hygienic care of the school child. Why not urge a law similar to Massachusetts, which, in brief, is as follows: The school committee of every city and town shall cause every child in the public schools to be separately and carefully tested and examined at least once every school year to ascertain whether he is suffering from defective sight or hearing or from any other disability or defect tending to prevent his receiving the full benefits of school work or requiring a modification of the school work in order to prevent injury to the child or to secure the best educational results.

This law appears comprehensive and yet is lacking in a very important particular for our model. It makes no provision for the country schools—the fountain head of the stream of humanity into the towns and cities.

Again, this commission should advise that a medical man be placed upon the

State Board of Education. His advice should be just as far-reaching as that of the Attorney General. Why should we after all provide for medical oversight of the school child? Here are some of the reasons: Harrington says that the extent of physical defects in children may be concluded from the results of the examination of 200,000 children in New York between the ages of 5 and 15 years. Sixty per cent. were under nourished, 66 per cent. needed medical and surgical care, 40 per cent had bad teeth, 38 per cent. had enlarged cervical glands, 31 per cent. had defective vision, 18 per cent. enlarged tonsils, while 10 per cent. had adenoids. It has been estimated from the result of a recent investigation among school children in New York City that there are in this country 12,000,000 children having defects more or less serious that should receive attention from parents and family physicians. These startling facts cause us to view with alarm the results of the work of the Russell Sage foundation in New York for the study of the backward children. Leonard Ayers reports the loss in progress of the different defects as follows:

Enlarged glands	14.9
Defective vision	None
Defective breathing	7.2
Defective teeth	5.9
Hypertrophied tonsils	8.9
Adenoids	14.1
Other defects	8.5
Average	8.8

Aside from the physical discomforts, the damaging influence of these defects on the mind and morals places upon us an added responsibility. Should we fail to secure legislative enactment, as in most countries and some States, to aid us in solving these problems, what course is open to us? We must mould public opinion in our favor by private efforts. Such a plan as that in Switzerland would soon bring tangible results. Every school board has a physician as an active member, even in the remotest country districts. I know that many of our most influential physicians occupy similar positions and can now exercise great power toward the good we have outlined.

I trust that I have impressed you with the great necessity for this effort on the part of all concerned in the welfare of our schools and hence will review the work at Seneca, beginning September 23, 1909. The staff of examiners consisted of two competent dentists, an eye and ear, nose and throat specialist, two general practitioners and a secretary, the teachers rendering efficient aid at times. There were 200 pupils from 6 to 18 years—consisting of all pupils from first to the tenth grades—with the following results.

Teeth Defects—No. of pupils, 153; No. of teeth, 600.

Tonsil Defects—No. of pupils, 32.

Enlarged Glands—No. of pupils, 24

Adenoids—No. of pupils, 3, (with a number of suspects.)

Eye Defects—No. of pupils, 19.

Nasal Defects—No. of pupils, 3.

Skin Lesions—No. of pupils, 2.

Orthopedic Defects—No. of pupils, 4.

Teeth Brushed Daily—No. of pupils, 170.

Cards of record were used to retain and were sent to parents; cards for school government, sanitation, lighting, heating, etc.

I cannot find any report on the negro school child in the South. I examined a representative number and found in general faulty nutrition, practically all with teeth defects—contrary to the idea that prevails. Fewer serious tonsil defects compared to the whites, more skin lesions. I did not examine for adenoids. A fair proportion had used the tooth brush.

I also examined a representative number of cotton mill children among the whites. Ninety per cent. had bad teeth—not one used a tooth brush. The other defects differed little from the average

school child. I hope to pursue investigations of these two classes of pupils more exhaustively for a subsequent report. I merely allude to the subject in the hope that others may be stimulated to look into the matter also.

The Seneca schools are the first in South Carolina to put in operation the modern idea of medical inspection. Few anywhere have enjoyed such a thorough examination, as the work is generally carried on by one or more general practitioners and trained nurses. The specialists, while not absolutely necessary, add infinitely to the effectiveness of the work in every way. The dental feature is very interesting. The plan of rewards for personal hygiene we have, after grading daily on such matters as brushing the teeth, gives us 170 out of 200 brushing their teeth daily. Last year the handsome gold medal was awarded in the presence of the greatest concourse of people ever assembled in our county—and by one of our most distinguished orators and educators, the present president of the South Carolina Teachers' Association, Dr. D. W. Daniel, of Clemson. Such occasions make for progress. New Orleans and Atlanta both took up this work with the sessions of 1908 and 1909. In the last few months other towns and cities have become interested one way or another in our own State—Anderson, Easley, Greenville, Connie Maxwell Orphanage and possibly others.

To secure treatment when needed for the defects disclosed is a large problem. All of our most serious cases were treated by or on the advice of their family physicians. In some places the school clinic has been opened. The English speaking nations have been tardy in this phase of medical science—the Southern States of America showing up to a decided disadvantage. To the general practitioners, specialists, including dentists, this field of work offers much of interest. It places him at once in contact with the great world of progressive education. It takes one out of the narrow confines of the sick room or hospital and opens greener fields and pastures new for research. The emoluments as the commercially inclined doctor views them, may not suffice to secure his enlistment in the fight preventive medicine entails—yet such men as Jenner, Koch, Reed, Lazear, Carroll, Flexner, Welch and Gorgas have deemed the saving of human lives sufficient inducement for them.

DENTAL INSPECTION OF PUBLIC SCHOOL CHILDREN—THE NEED OF EDUCATION OF THE MASSES ALONG DENTAL LINES.*

By J. P. McCreary, D. D. S., Spartanburg, S. C.

Among the causes for advancement of the world in any line none seems freighted with more power, with greater prospects for future good than the scientific study of the mental and physical development of the child. Men of all nations realizing that public health is a valuable asset are bending their efforts to head off, so to speak, every condition of disease by preventive measures.

Interest in the care of the health of school children is a growing factor among the varied activities which have for their purpose the conservation of the public health in general. A generation ago those concerned with the problems of public education considered any question of child health other than the more

*Read before the Spartanburg County Medical Society, July 29, 1910.

obvious rules of hygiene as outside their range of responsibility. Now the health of school children, individually and collectively, is of paramount consideration by educational authorities. This change in attitude is the direct outgrowth of the scientific study of child development in relation to educational methods which have been actively in progress for many years, and which have engaged the attention of the most able thinkers the world over. This has brought to public attention the fundamental fact that a sound mind can only be developed in a sound body. The care of the health of school children who are the wards of the State, from an educational standpoint, is not merely a humanitarian question. It is an economic question of the first magnitude. The child's health, mental and physical, is a national asset which it is the duty of the State to preserve and foster. It is the recognition of this fact which should operate most efficiently in securing the adoption of salutary means for improving the physical condition of those of the rising generation upon whom the duties of citizenship must subsequently fall.

Absolutely nothing can stop the adoption of dental inspection. It has got to come. Germany started it in 1878, and made it general about 1900. There it is compulsory for children to have their teeth examined and cared for, and in some municipalities it has gone so far as the city's paying for the work on children's teeth. From the scientific standpoint it has been proved that astounding conditions exist and that the poor condition of the teeth of children in the schools actually costs the State money for the children do poor work, work more slowly; and educating them is therefore more expensive and less productive of good results than if the children could do their best work. They *cannot* without good teeth. School authorities are, as statistics show, improving the minds of backward pupils by improving their bodies. The mental efficiency of school children can be greatly aided by the proper care of their mouth and teeth. This is freely attested by experiments in Germany. There dental infirmaries have been in connection with the schools for a sufficient length of time to prove this. It has been found out that:

1st. The time expended in putting the teeth in order was far less than the time formerly lost from toothache and disability caused by disease.

2d. That the cost in keeping the teeth in order was more than compensated for by better health and a consequent reduction in medical expenses.

3d. That the child became physically stronger, made a higher average in its studies, was easier to control and apparently happier. This work of inspection has advanced further in Germany than elsewhere.

One expert, after an examination of 157,000 children, found 90 per cent. had defective teeth, and from this and other observations he drew these deductions:

1. On account of bad teeth the physical development of the child is seriously retarded.

2. The more the physical development of a child is disturbed the less in general is the mental capacity of the child.

3. The worse the teeth, the worse, as a rule, is the school standing.

In one town in Germany, where there were free dental clinics, teachers noticed an increased attendance at school—the working capacity of pupils increased, they were fresher and more alert in their lessons. There was also noticed an educational influence over their parents.

English statistics show from various examinations that the percentage of children in England having decayed teeth varies from 75 to 97 per cent. In Germany out of many hundred thousand 95 per cent. had dental caries. In Russia the same, and in Italy 96 to 100 per cent. The statistics of the United States are meagre—unreliable. Of army recruits 20 per cent. of Germany and 24 per cent. of England have practically useless

teeth. Of 18,000 men refused enlistment in the United States army in one year 1,000 were rejected on account of bad teeth.

During this summer, when most of the dental societies of the South have met, the subject receiving most attention, excepting oral prophylaxis, was that of inspection of school children's teeth. This matter of inspection is being taken up by sheer force of its own importance. This work has, so far, advanced further in Japan than in the United States. We here in the United States, who should lead in everything should wake up, and, though behind, yet set a pace for other countries in the matter of looking after school children, both from the standpoint of the physician and the dentist. The State of Massachusetts has made progress in this inspection work and a great many northern cities have adopted the plan of inspection, and some, Boston for instance, have free dental clinics.

People of the North have been taught a few lessons by us of the South. Generally, they have considered us backward, but now we have a New South and we can turn their eyes here for other reasons than our prosperity—we can adopt the matter of inspection of school children generally throughout the South and let's do it and be first among the pioneers of the cause. Medical inspection of the schools has gone on for a year in Atlanta. The dentists as yet have not taken a hand.

We propose to co-operate with the physicians in this city, and have, if possible, inspection of our schools at an early date. We can examine the children and advise the parents as to their needs and ask that these be attended to. This method will in all probability meet with disapproval from some parents, but we as physicians and dentists certainly do represent an element of citizenship who should be allowed to dictate some, and it is up to us, as I have already said, to run this matter as we please.

Now as to free clinics: We should have those. The dentists are willing to do inspection work and give up some of their time also to free clinics—we can have free clinics, but to do this we must have help. Money must be forthcoming from some source. At present we can't hope to receive any aid from the State to carry on dental or medical clinics. The State Government is already taxed heavily enough in supporting public charities. The legislative bodies are compelled to limit their benefactions to institutions and charities dealing with dependent classes. So our only hope is to get city government aid and individual subscriptions to carry on this work. Our city government could strain a point and help in establishing free clinics if it would always exercise the best judgment in the expenditure of its money and try to strike a happy medium and touch every cause for good. Free clinics should be as necessary as the keeping of our Y. M. C. A., and in my opinion they probably come pretty close to exceeding it in importance, money going for some missionary purposes. We can make room for these necessities if men see fit to do so. There are lots of things less important in life that are easily financed. Let's see to it that we have free clinics along with school inspection.

In order to effectively rally the citizens to our cause it is necessary to educate them to the importance of the matter. For years different members of the profession have talked about educating the masses in dental matters, but for one reason or another little has been accomplished in this manner. Objections have been raised against any dentist preparing such articles under his own name on the grounds that he was in a sense advertising himself and making a bid for patronage. In towns and cities where there were a number of dentists no one seemed willing to have another write such articles, and as no one would volunteer to prepare matters for newspapers in other places than his own the instruction thus given has amounted to but

little. In the meantime the newspapers and magazines generally have printed hints on the care of the teeth, along with complexion lotions by the editor of the household department—generally objectionable, injurious and worse than none. Members of the dental profession have watched this and said nothing. They have done nothing to directly correct such ill-advice and comparatively little to teach the public themselves in the care of the mouth and teeth.

However, there seems to be a general awakening at present. A wave of enthusiasm regarding inspection and the establishing of dental clinics for the poor. Less than 12 per cent. of any community pay any attention to the care of the teeth and mouth, and in the light of this it is high time we as dentists were trying to dispense information. A German professor said: "If I were asked to say whether more physical deterioration was produced by alcohol or defective teeth I should unhesitatingly say defective teeth!" Another French physician says: "Everybody seems to be on a diet. If people were a little more careful about their teeth, they would not need to be careful about their diet." We as dentists want to impress on the public the care of the teeth and of the whole mouth. How many mothers in this city do you suppose begin to try to clean a baby's teeth as soon as they appear? How many know when the six-year molars erupt and are able to distinguish them from the temporary teeth? How many parents do you suppose compel their children to brush their teeth? A very few, indeed. When told about children's carelessness in this respect parents say: "Well, I could not persuade him or her to brush the teeth." My opinion is that if parents realized this all-important question in its full degree of seriousness they certainly would themselves do the brushing until the habit is formed by the child or it is old enough to have sufficient pride to keep this up.

It is estimated that over one-half the children born in the world die before the age of sixteen and four only in one hundred have good teeth. No doubt this could be reduced if proper care was taken. These estimates and statistics are alarming. A wise plan, I think, would be to give these facts the widest publicity possible. This can be accomplished by (1) lectures, (2) by pamphlets, (3) through newspapers, (4) by examination of children's teeth in the schools.

1. In the matter of lectures the dental societies could begin and carry on a series of these before schools, the different kinds of clubs, associations, etc. These should be simple and to the point, making use of stereopticon views for illustration.

2. As to pamphlets of information, these could be gotten out by dental societies and distributed from time to time under the direction of these societies.

3. Newspapers. At a meeting of our Piedmont Dental Society in Spartanburg some weeks ago, there was a committee appointed to get up educational matter and report to the president and vice-president, and if they approved of the same this committee was then empowered to have printed from time to time these short squibs of general instruction—points on which the public generally is ignorant. We propose to do this without notoriety.

Let us have medical and dental inspection of public school children and free clinics. Let us appeal to the public to awake to their needs along these lines by educating them to the real condition of things, by soliciting their faith in our sincerity; and having gained that faith let's establish it with works.

This age seems to be an age of altruism, an age of charities. This is because of the higher development of man. The greatest good man can do is that done to a fellow man. Men are spending money for the good of men. Those of us who haven't money to give to the great causes of life can give time and work. This age, it seems, is fast reaching the height of its fame in every line of science. To attain

greater heights man must have higher development of his brain. For a more perfect brain there must be a stronger body. It seems then that the Creator has something greater in store for his people by putting this movement agoing. Look to the removal of all physical limitations, to the development of the mind. Things are only revealed when men delve into mysteries scientifically—by a connected chain of thought—and through this higher mental development wonders may be revealed and thereby have a perfected civilization.

PILES.*

By Dr. A. Dan Morgan, Perry, S. C.

Mr. President and Gentlemen of the Lexington Medical Society:

In acknowledgment of the courtesy extended me through your secretary, Dr. Wingard, I have prepared a rather lengthy article on "Piles."

This disease is so common, so well known, the bare mention of the name is enough to provoke a smile. Yet, unless the trend of your thought runs in a different groove to the thought of other medical men, with whom I am associated, I could have not selected a more practical subject.

Our most ancient literature mentions piles as among the earlier disease conditions which were diagnosed and treated.

"The Lord will smite thee with the botch of Egypt and with the emerods," is quoted from a speech made by Moses to the children of Israel, as recorded in Deuteronomy, XXVIII. Chapt., 27 verse. In I. Samuel, V. and VI. chapters, you will find quite an extended account of the emerods among the Philistines.

The V. chapter ends: "Were smitten with emerods; and the cry of the city went up to Heaven."

The treatment advised was to take gold and make images of the emerods, with which certain things were to be done.

A thousand years later Hippocrates and Galen were writing of hemorrhoids, and it seems the Druid priests of Britain were giving attention to this same disease at about the same time.

When we consider the numbers of people who are to-day smitten with this disease, then compare the Irish potato or buckeye, as now used, with the golden emerods of the Philistines, there is a feeling that, after all, the human being has not made such wonderful advancement. A sensation of self-reproach in that we, the heirs to the acquired learning of the ages, the doctors of medicine, or in the original meaning of the word, teachers of the art of medicine, we have failed in some way to do our duty.

It has been said: "Among the many diseases to which flesh is heir, it might be said that there is none of more common occurrence, more annoying or more acutely painful than hemorrhoids." To this quotation it is probably safe to add, and there is probably no disease worthy of consideration which is to-day receiving less attention from the profession at large.

This neglect by the profession has driven many sufferers into the toils of charlatans and nostrum venders, where they go through life trying first one then another reputed cure. Hoping, hoping but never expecting, and never cured.

The word piles is often used as a generic term, meaning any diseased condition of the lower rectum and anus. Such is not my understanding.

I know nothing of Greek, but, it is said, the words from which *emerod* or *haemorrhoid* are derived mean "blood" and "I flow." The Latin "*pila*" means not an exact sphere but a rounded or

*Read before the Lexington County Medical Society, Jan. 3, 1910.

globular body, as our English pill. The two are admitted as designating the same tumor, therefore, to differentiate these tumors we must combine these characteristics. A globular tumor of flowing blood. This is only possible and only occurs when the veins of the rectum are so varicosed as to protrude through the external sphincter ani muscle.

It is evident that such tumor may have a covering of mucous membrane alone, or mucous membrane and skin in varying proportions, or of skin alone.

Off hand such tumors do not seem worth attention and you have already been assured they get very little.

However, when we consider the liberality with which sensory nerves are supplied to the parts and the functions of the parts—absorption, retention and expulsion—and remember that tumors lie within the grasp of a powerful involuntary muscle, their importance is at once demonstrated.

These varicosities usually begin developing between the fifteenth and thirtieth years of life, but they are not limited by age, sex, station or color. At first they usually come down only during defecation.

In this stage they are short and elastic, and while they may be caught by the sphincter and given a twinge, will slip from its grasp without assistance.

If this stage is brought on by some definite cause as pregnancy, constipation, auto-infection by reabsorption, a condition in which the liver is overloaded and engorged, the pile will often pass with the passing of the cause.

(Just here it may be stated that these are the only piles ever cured save by radical treatment.)

As time goes, on by varied presumed causes, but obviously by repeated grasps of the sphincter, they are stretched, lose their elasticity and require assistance to be returned. Symptoms have kept on apace and distress is markedly increased. The loss of blood, which may have been noted before, now becomes a prominent symptom and may afford a temporary relief. Hemorrhage may be slight or free, and it seems that the blood may be lost by either exosmosis or rupture.

Control of the pile mass is gradually lost till it comes down at other times than during defection, as, for instance, by some strain on the abdominal viscera, either sudden or long continued, which forces the pile out. Or perhaps some irritation disturbs the tranquility of the internal sphincter muscle, which being aroused, forces it out.

Perhaps a flaccid condition of the sphincter literally permits it to drop out. Now, sooner or later, circumstances will arise when it is impossible to put it back immediately or to keep it up after being put back. And now there is going to be what is commonly called an "attack of piles," and while there may be no outcry going up to Heaven, there will be moanings and groanings to resound on the palpitating air.

As soon as the pile is out, the circulation is still more retarded and congestion sets in. The sphincter, even if it had been flaccid, regains vigor and strangulates the mass. The secretion of the sweat glands, which in this location usually becomes rancid, is an irritant, in the midst of which a three-cornered battle royal is waged, the hand trying to keep the mass in, the internal sphincter determined to keep it out and the external sphincter, while seeming to aid either the one or the other, is all the time making an independent effort to bite it off.

Anxious friends and too often the family doctor placidly offer the consoling comment: "Oh! it's nothing but a case of piles." These "attacks" terminate in accord with the law of inflammation, by resolution, ulcer, abscess or gangrene, The most common of which is resolution, the happiest of which is gangrene, because the patient is then cured.

Barring radical treatment and gangrene, you have my unqualified permission to quote me, saying: One such attack of piles, it matters not how treated,

is an absolute guarantee of trouble yet to come, the least of which is hypertrophy, which may become permanent. Varicosities are increased. It is probable blood clots are next most liable to occur. These may be either absorbed or organized into fibrous tissue. They have a fair chance of becoming septic, resulting in abscesses which in turn will probably result in deep ulcers or fistulae; or the clot, being in a vein, may become an embolus with attendant ill consequences. A pile may burst, or a superficial ulcer become deep and the sinuses being opened will probably pour out a sufficient hemorrhage to be alarming if not to cause death. These sinuses will not collapse as normal veins do; but stand, for a time, an open portal to infectious organisms. While not being able to offer any proof, save appearances in clinical observation, I sincerely believe, in many cases, hepatic troubles and rheumatism are directly chargeable to piles. These are also to be classed among the either immediate or remote sequelae of an attack of piles—sympathetic troubles, vesical, prostatic, neuralgic and mental derangements through their varying grades, even to insanity. Immediate inflammation having healed, the patient is said to be well and —has the piles..

Conditions continue growing worse. The patient lives with a sense of impending evil, many of the vocations and pleasures of life have to be practically abandoned or paid for in physical suffering. The cycle of events with concommitant dangers, just stated, being repeated from time to time. And a repetition will probably complicate any intercurrent illness. The hypertrophied folds permit a leakage of excoriating discharges, causing pruritus—may be ulceration of the rima clunium. In advanced stages it becomes impractical to control the mass, which, by ulceration, affords almost constant harassing, if not exquisite pain; and in many the loss of blood is well-nigh continuous.

The patient is now prematurely aged, anaemic, haggard, cadaverous; and too often life is ended by a supervening cancerous affection which simulates a result.

There is no question but that the neglected pile is causing more suffering to the human race than is caused by the fashionable appendicitis; and, I believe, it will require careful observation in a large number of cases to decide which of these two diseases condemn the patient to the greater suffering and the greater risk of life.

The relief of suffering has a more valid claim than conventional modesty. Insist on knowing the real condition of the patient.

To get a general idea ask the patient if the sensation is similar to passing a finger over the tips of the fingers on the other hand, held together, and if protruberances can be pushed back.

Personal examination, either digital or or with speculum, reveals very little in earlier stages, though by hooking against the rectal wall a pile may be pulled out.

Place the thumbs near opposite margins of anus and by pressure evert the mucous membrane, this will probably show any varicosities. Give an enema or ask patient to bear down as if constipated.

It has been the dream of the ages to find some means of curing piles, that is, of restoring varicosities to normal

In days past faith in a look at the Brazen Serpent, which Moses lifted up in the wilderness, was an antitoxin, specific to the venom of snake bite. Later, faith in touching the hem of the Saviour's garment healed the woman of an issue. In those days I do not doubt the ideal cure of piles was accomplished.

From a professional point of view, this treatment and cure can be classed only with the lost arts, and there remains to us a choice between inefficient palliation and radical operation.

The palliative treatment is too universal to permit either commendation or comment, the potato and the prescription giving practically the same result.

The cure of piles is the same as the

cure of varicosed veins anywhere else—destroy the continuity of the veins. The time to operate is when the patient is ready. I do not, of choice, select highly inflamed fields for operating. However, I do not believe the suffering and risk of a patient with an attack of piles will be increased by the operation, and in many cases it is an immediate relief.

The place for operating is a matter of choice with the patient. The hospital is more convenient to the operator, the patient is more comfortable at home. Notwithstanding argument to the contrary, I know that all necessary nursing can be done by almost any one of ordinary intelligence.

A great number of ingenious methods have been devised for doing this operation. I lay the rule:

That method should be selected, which, while giving desired results, contains in its essence, the least possibility of detriment to the patient. We shall now consider a few methods:

The Whitehead—Devised by Dr Walter Whitehead, of Manchester, England. An essential of this is to remove an inch to an inch and a half section of mucous membrane the entire circumference of the rectum, then unite the edges with sutures. The chances of success depend on keeping the wound aseptic in a location where it is impossible to give a reasonable protection. If the operation succeeds, the patient is cured, nothing more. "Tortures of the damned," expresses the patient's condition if it fail. This method is not legitimate surgery.

The injection, devised by Dr. Mitchell, of Clinton, Ill. The essential of this is to inject some caustic fluid, usually carbolic acid, into each pile by means of an hypodermic needle. The chances of success depend on the resultant action of the caustic, which is no longer under control. This method may have some limited usefulness, in selected cases, but the risk is too great for it to be advisable.

The clamp-and-cautery, devised by Dr Cusack, of Dublin, Ireland. The essentials of this are to dissect the skin from the pile proper, clamp the pedicle with an instrument devised to hold it, then cut the pile off about one-quarter inch above the clamp, then sear the stump with a cautery, heated to a dull red, then loose the stump slowly. The chances of success depend on the actual cautery to control hemorrhage, the time required for the resulting ulcer to heal and the amount of cicatrix formed. This method is now the most popular before the profession, and while I am going to attack it in favor of another operation, I full well realize that I am treading on dangerous ground. It has a place in surgery, will probably ever remain a standard operation and at one time very nearly persuaded me from the path of rectitude. It will be discussed later.

The ligature, devised by some ancient operator of so remote a past that name, time and place are lost in oblivion. It was practiced by the semi-savage Druids of Britain, by the polished physicians of Greece. It is probably coeval with the pyramids; and, in having rivalled every treatment from the golden emerod to the clamp-and-cautery, has, like the Pyramids, withstood the ravages of time and the genius of man. Like the Pyramids, it stands an unequalled achievement of ancient effort, then strikingly unlike the Pyramids, those monuments to personal vanity, this is a monument to philanthropy, a benefaction to the human race. The essentials of this are a pile, a ligature and an operator. The chances of success depend on the efficiency of the operator. This method is an art, and in order to show its beauties, requires the work of an artist.

The clamp-and-cautery, already admitted standard, is the only operation which merits comparison with the ligature. The principle of the two is identical till it reaches the final treatment of the stump—there they differ almost as widely as possible; and there the clamp-and-cautery almost, but not entirely, loses out. In one the tissues are constricted, cut, cauterized and loosed, when immediately

the normal resiliency of the tissues begin drawing the wound apart and the first distention of the rectum by either gas or feces make it a wide open burn, which, by the inflexible law of nature, must pass through all intermediate stages before being healed. In the other tissues are constricted and so held while the wall of protective lymph is being formed and organized, which in its turn will continue holding after the ligature has come off, thus leaving only a small and superficial ulcer to heal.

Wonderful claims are made, I have seen them in print, that, after clamp-and-cautery, some patients are so nearly healed as to be out of bed in four or five days. If I were either so credulous or so enthusiastic I could report a case where, after a ligation under local anesthaesia, my patient was so nearly healed as not to get in bed and walked to the buggy with me when I started to leave. As a matter of fact, after ligation many patients do not keep their beds at all.

Personal experience is the thing that convinces a man, and here is my experience: While, as before intimated, no great number of operations for piles have been done around me, but for the past twenty years I have done the majority of those which have been done in my territory, and I have done the ligature operation to the exclusion of all others, and I have never had undesirable sequelae after any. On the other hand, the minority have been distributed among various operators who are as able as the land affords. All these operations are said to have been done by some cautery or injection method. There have come to me for treatment two patients with ulcers, which required months to heal, which are said to have followed the clamp-and-cautery, one with strictured anus, after some electric cautery, and one with a fistula after an injection. Moreover, it is not reasonable to suppose, after going to other men for operation, all who get in trouble come to me. I have said the clamp-and-cautery has a place in surgery. I now say its place is for the use of those operators who do not have ordinary skill with the ligature.

The details of the ligature operation are given in practically every text book on surgery, and I shall only call attention to a few ideas of my own. Use a ligature which by previous trial you know you cannot break, about a 12 to 14 silk. If forceps are used in holding the pile, use either a double or single tenaculum forceps; it is impractical to draw a knot tight under long bladed forceps. If the pedicle is to be transfixed and tied in halves, first tie a knot about half-way the doubled ligature, so when needle is cut off you have four ends, by which you will have no trouble in getting the right ends and will not pull the halves apart in tying. If it is a very fleshy or fibrous pedicle, use a single wrap or sailor's knot, as this can be pulled down tighter than the surgeon's knot, after crushing the pedicle into proper shape. If the knot does not hold it can be taken loose and surgeon's knot tied.

In trying a small non-fibrous pedicle be careful or it may be cut off as with the serre noeud of an ecraseur.

The lithotomy position is generally the best, and to get this position I use a stick eighteen or twenty inches long, the size of my thumb, wrapped with roller bandage, a piece of three-inch roller about two feet long is tied at each end, then a piece of three-inch roller about five or six feet long; one end is tied to one end of the stick. Place a rolled towel around each leg just above the knee and tie one of the short pieces over the towel around each leg, then bring legs into position and carry the long strip over a towel at the back of the neck and tie to other end of stick tight enough to hold legs up.

If the pile is too large to be comfortable in the rectum after being ligated, I split it and scrape it out, thus leaving a more secure hold for the ligature than if it was cut off. I prefer corded lamb's wool, as sold by the dealers, to cotton, for the canal compress, the wool being more resilient, makes it somewhat more comfortable.

CHOLERA INFANTUM.

Read by Jno. O. Vernon, M. D., Ex-President of Spartanburg County Medical Association—Written by His Father While a Student at U. of Pa., 1827.

BY J. J. VERNON, OF SOUTH CAROLINA.

(The following is printed as an interesting retrospect.—Ed.)

This is a disease peculiar to the United States. I have not found in any foreign work an accurate account what I would call cholera infantum. Children are liable to it about eighteen months of age or second summer. It makes its appearance here about July and continues until frost, and in South Carolina commences in May. Damp, warm seasons are the worst for its occurrence; it frightfully fills up the bill of mortality.

Causes: Among the first, salty meats, unripe fruits, imperfect clothing inaccurate to the sudden changes of our climate; brought on by teething, worms, etc., etc.

The spasms of the bowel are severe, embracing the limbs also, child screams out and draws up its limbs. There are other cases resembling dysentery, producing muco-sanguineous discharges with tormina, etc., etc. In all cases the pulse is small, quick and irritable—the eyes wild and fierce, more commonly they are languid, sleep with them half closed, thirst considerable, tongue white, furred in the commencement, but becomes dry and red.

The head and regions of the bowels are hot and extremities cold; when drinking frequently vomiting comes on immediately, evacuations generally green, smell sour and of a flocculent fluid resembling coffee grounds; the attack being of a severe character it runs a protracted course. Prognosis is far more difficult than diagnosis. Cholera infantum in its ordinary course may be considered doing well when the irritation of the bowels subsides, but unless the liver is restored convalescence will not be apt to take place. Pink colored stools are found peculiarly in this disease, and sometimes in dysentery, when they appear you may consider the child in great danger, in protracted cases effusion often takes place constituting hydrocephalus, dark spots over the mucous coats more or less—what is called the *blush* of *inflammation.* The calibre of the intestines is so narrowed you can scarcely introduce a quill. Liver under all circumstances is enlarged by congestion. Sometimes dark green bile, often nearly colorless; it is probably a gastro-enteritis and secondarily affects the hepatic apparatus and produces an increased flow of bile thrown upon the duodenum, producing an irritation.

In all hepatic derangements there is an affection of the mucous surface of the *prime vie* travelling along until the whole liver is wrapped up in the disease. In display of morbid tissues, the brain, more especially the arachnoidal membrane, becomes seriously affected and hence hydro-cephalic effusion so common in this disease.

Treatment: Purgatives, especially castor oil if the disease is of a mild nature, but in violent atacks it is impossible to get it to lie on the stomach, then I would give alkaline mixtures, strong coffee without milk or sugar, or opiate by rectum, or hot fomentations to the stomach, but strong lemonade is highly recommended, small doses of calomel combined with opium, grs. one-sixteenth every hour, but in some instances we wish to purge, only then I would give calomel alone, but when there is great irritation we combine them. Sometimes it is ushered in by great gastric disturbance—

febrile heat with a quick irritative pulse —in these cases we might get relief from vomiting with small doses of ipecac, although the common practice is not such. When there is not great debility they may be used; when extreme debility they should be withheld, sinapisms, and above all, opiate injections. It represents sometimes a gastritis, enteritis, duodenitis and colitis, cases of this kind are rare and the lancet too often neglected—it often relieves and tranquilizes the child but requires discrimination to regulate the lancet—topical bleeding should also be used when you think congestion and doubt the propriety of vene-section. While determining, apply to head cold applications and blister the nape of the neck. Calomel given to carry off the bile, but if watery stools, substitute small doses of calomel and opium and work it off with castor oil.

When this is done we must leave off purges but keep the bowels in a loose condition; in too many cases we carry purging too far. I would, after moderate evacuations, continue calomel, opium and ipecac to overcome the irritability of the intestinal canal; acrid discharges and other symptoms soon subside. Besides, we have a healthy action between the interior and exterior surface. The warm bath is highly recommended —produces a glow over the whole surface; it may be more effectual by adding brandy and coming out of the tub rub the surface with cloths. The disease continuing a week or more terminates in diarrhoea. The following formula I would give to correct this:

℞

Carbonate soda and potassa, Grs. XXX
Creta preparata .....Drs. 2
Gum arabic .....Drs. 1
Laudanum .....Gtts. XX
Loaf sugar .....Drs. 1
Aqua, qs. ad.....Oz. 3

Ms.

Lime water and milk is here useful, powdered charcoal with magnesia or with either of the alkalies in equal parts.

℞

Rhei palmata .....Grs. XV
Ipecac .....Grs. V
Calcined magnesia .....Grs. XX
Loaf sugar .....Grs. LX
Laudanum .....Gtts. X
Aqua, qs. ad.....Oz. 3

Ms.

It sometimes becomes a colliquitive diarrhoea, its continuance owing to chronic irritation of intestines or congestion of liver. Tonics are advisable, lightens irritation, the mildest and most soothing medicines should be used. I would use the following:

℞

Cret preperata .....Drs. 1
Tr. Kino .....Drs. 1
Aqua .....Oz. 1

Ms.

A strong infusion of the blackberry root would be highly useful in this disease. The following is another useful prescription:

℞

Sulphas iron .....Grs. 11
Sulphuric acid .....Gtts. X
Loaf sugar .....Drs. 1
Aqua .....Oz. 1

Ms.

Sig—Teaspoonful administered Pro Re Nata.

There is one more that is indispensable —the anodyne enemata.

In great relaxation of the bowels a flannel roller will often put an end to those frequent attacks of diarrhoea. Let it be fed upon diluted cow's milk, barley or rice water with a little milk or a solution of gum arabic, mint tea, soda water, burnt bread and water. In the advanced stages tapioca, arrow root, etc.

If there is extreme debility of the bowels existing, a little ham or fish may be taken, particularly the fat of the ham; fruits, such as ripe peaches, and a change of air; ride the child out two or three times a day.

1st. To prevent this disease never allowa child to be weaned within a year; it always predisposes it to the attack.

2d. Cold baths used in the morning some little time after arising from the bed.

3d. Direct wearing of flannel next to the skin and yarn stockings.

4th. Regulate the diet; proper diet is milk, after a few months a little animal food.

5th. During dentition examine the teeth; if gums swollen lance them. Lastly, and above all, let the child be carried to the country.

DON'TS IN MEDICINE AND SURGERY.*

By Dr. Walter Cheyne, Sumter, S. C.

1. *DON'T* fail to make an exhaustive physical examination in every patient who comes to you. This means heart, lungs, liver, kidneys, abdominal palpation, urine and sputum, where necessary. Your error may not only mean the loss of your reputation but also the death of your patient.

2. *DON'T* delay in an operation for appendicitis after the diagnosis has been made. Don't be influenced by ignorant people to wait until the patient is in danger of death. Pus walled off or walled in you will drain. The removal of the appendix in most cases may be deferred when drainage is established.

3. *DON'T* think an examination of urine is made by intuition. Fresh reagents, exact methods which certainly include filtration, are necessary for you to make a positive statement to an insurance company or to a patient.

4. *DON'T* be surgically careless after a pus case; disinfect as you would after a *post-mortem*. Pus clings to all tissues; pus germs are not harder to kill than most other germs, therefore take proper precautions to kill them on your hands and on the places where they originated, if possible.

5. *DON'T* claim to know every skin eruption you see. Perhaps five men in the United States do know such eruptions. If you are doubtful say so; it won't hurt you and may do the patient good.

6. *DON'T* tell a man he is cured of gonorrhoea unless you know. If you don't know and you tell him he is cured, you may cause a woman's death.

7. *DON'T* think you know all medicine and surgery until you have studied the methods in seven different cities and have practiced conscientiously for 25 years. Even then you may turn over in bed at night several times and have doubts as to your knowledge.

8. *DON'T* feed poll-parrot style in typhoid fever. You can starve a patient to death in typhoid fever as well as have the fever kill him. Anaemia must be combatted as well as the fever. Better higher fever than a feeble heart.

9. *DON'T* forget that scientific knowledge, added to scientific equipment, plus a practical knowledge of human nature, are the trio necessary to professional success.

10. *DON'T* minimize the value of membership in a medical society. The charlatan cannot get in. Count the number of successful professional men you know who are not members of their State Association.

11. *DON'T* use a drug, unless you know it is necessary. If in doubt, leave out the medicine.

12. *DON'T* forget in medicine or surgery the Golden Rule: "Do unto others as you would that they should do unto you."

*Read before the meeting of the South Carolina Medical Association, in Laurens, S. C., April, 1910.

DIGEST OF MINUTES OF MEETING OF THE AMERICAN MEDICAL ASSOCIATION, ST. LOUIS MO., JUNE 6-10, 1910.

The sixty-first annual session of the American Medical Association was held at St. Louis, Mo, June 6-10, 1910. The registration was 4,070, this being the third meeting of the Association in point of size, and only surpassed by the Boston session in 1906 and the Chicago session in 1908. The weather was practically perfect and the local arrangements admirable.

The House of Delegates met on Monday morning in the Auditorium of the St. Louis Medical Society building. The president, Dr. W. C. Gorgas, U. S. A., read his address, in which the work of the Association was commended and a number of suggestions made. The report of the general secretary showed that during the past year 289 members had died, 1,937 had resigned, 1,031 had been dropped and 95 had been removed from the rolls on account of being reported as "not found," making a total loss of 3,352. During the year 3,593 new members were added, making a membership on May 1, 1910, of 34,176. The application of the Medical Association of the Isthmian Canal Zone for recognition as a constituent association was presented. The death of Ex-President Herbert L. Burrell was commented on. The secretary presented a tabulation showing the membership in the constituent State associations amounting to 70,146. The history of the secretaryship and its connection with the editorship of *The Journal* was reviewed. Dr. Simmons presented his resignation as general secretary and asked that it be accepted. The report was referred to the reference committee on reports of officers.

The report of the board of trustees showed encouraging progress in all lines of Association work, the work of the Council on Pharmacy and Chemistry, Council on Medical Education, committee on medical legislation, committee on nomenclature and classification of diseases and the committee on ophthalmia neonatorum being especially commended. The trustees recommended that the report of the committee on organization of a Council on Health and Public Instruction be carefully considered. The *addenda* to the trustees' report included a report from the subscription department, showing the average weekly circulation of *The Journal* for 1909 as 55,361. The treasurer's report showed a surplus in the treasurer's hands on January 1, 1910, of $163,340.72. The auditor's report showed property to the amount of $172,081.86, and total assets of $399,462.16. The report was referred to the reference committee on reports of officers. The report of the committee on medical legislation was presented by Dr. C. A. L. Reed, of Cincinnati, chairman. The year's work on national and State legislation was reviewed. Dr. Reed presented his resignation as chairman of the committee. The report was referred to the reference committee on legislation and political action. Dr. A. D. Beven, Illinois, presented the report of the Council on Medical Education, stating that during the past year the second tour of inspection of medical schools of the country had been made and submitting as a part of the report a classification of medical schools into three classes: (a) Acceptable, (b) needing certain improvements to make them acceptable and (c) those which would require complete reorganization. The report of the Council was referred to the reference committee on medical education.

At the afternoon session the board of public instruction and the director of the

post-graduate work submitted their reports. Dr. F. Park Lewis submitted the report of the commitee on ophthalmia neonatorum, reviewing the work of the past year and recommending that its work be enlarged so as to include all preventable causes of blindness, also that renewed efforts be made to have all births reported promptly so as to make possible more thorough work in the prevention of blindness. The report was adopted and the committee continued.

Dr. H. O. Marcy, Massachusetts, submitted the report on Davis memorial fund, showing total contributions of $2,771.34. Dr. Marcy presented his resignation as chairman and Dr. Billings presented his resignation as secretary of the Davis memorial fund. The report was referred to the board of trustees. The committee on nomenclature and classification of diseases reported progress. The Council on Defence of Medical Research reported the publication during the past year of thirteen pamphlets written by experts in the various fields and prepared for general distribution. The Council has also given much material to the daily press. The formation of a society of laymen for the promotion of medical research is being considered.

The reports of the following committees were presented: Patents and trademarks, uniform regulation of membership, elaboration of the principles of ethics and the United States Pharmacopoeia. The committee on anesthesia reported progress. It finds itself as yet unable to submit full and final reports for publication, but reaffirms the finding of the committee in 1908 that for general use ether is to be regarded as the safest anaesthetic. Major M. W. Ireland, U. S. A., presented a report from the committee on insignia, recommending the adoption of an official button showing the knotted rod and serpent as the insignia of the Association. Dr. Edward Jackson, Colorado, presented a report from the committee on the establishment of a Physicians' Sanitarium, recommending the appointment of a committee to draw up a plan for a corporate body to receive and administer funds for the relief of disabled physicians and to establish a sanitorium for physicians suffering from tuberculosis. The report was referred to the board of trustees. President Gorgas submitted a report from the committee on memorial to medical officers of the civil war, showing that three members had been appointed and that the two remaining positions would be filled by the appointment of one volunteer surgeon from the Union Army and one from the Confederate Army. After the presentation of a number of resolutions, which were referred to appropriate committees, the House of Delegates adjourned until Tuesday.

The House met on Tuesday afternoon with the newly installed president, Dr. William H. Welch, in the chair. Dr. Frank B. Wynn, Indiana, presented the report of the committee on scientific exhibit, recommending the preparation of cheap, compact and complete exhibits for the education of the public on all the problems of public health and comfort. Dr. Alfred Stengel, Pennsylvania, presented the report of the committee on scientific research, showing that three grants of $200 each had been made for the current year, as follows: Dr. R. M. Pearce, New York; Dr. Gerald B. Webb, Colorado, and Dr. E. C. Rosenau, Chicago. The committee on organization of a Council on Health and Public Instruction recommended that the committees on organization, medical legislation, public instruction and defence of medical research be abolished and that a council of five, to be known as the Council on Health and Public Instruction, be created. The report was referred to the reference committee on amendments to the constitution and by-laws. The reference committee on sections and section work reported, recommending the organization of a section on genito-urinary diseases with the following officers to

serve during the coming year: Chairman, W. T. Belfield, Chicago; vice-chairman, James Pedersen, New York; secretary, Hugh Young, Baltimore. The committee recommended that sections on physical forces in medicine and on hospitals be not established at present. The report was adopted. The reference committee on medical education endorsed the work of the Council on Medical Education and recommended that the rating and classification of medical schools as determined by the Council should be made public and that the Council should be instructed to continue its investigations. The classified list of colleges was presented as a part of the committee's report. (Copy enclosed.)

The reference committee on reports of officers recommended that the request of Dr. Simmons regarding his resignation as general secretary be respected and that his resignation be accepted in order that he might devote himself exclusively to the duties of editor of *The Journal* of the American Medical Association. This report was adopted. The reference committee on miscellaneous business recommended that the reports of the committees on pharmacopeia, nomenclature and classification of diseases and miscellaneous business be accepted and the committees continued. Dr. J. N. McCormack presented the report of the committee on organization, reviewing the work done for a department of public health and presenting the following resolutions:

Resolved, That the President be, and is hereby, authorized to appoint a committee of seven members, which shall be charged with the duty of framing a bill for a national Department of Health, to be presented to the next session of Congress in December, and that this committee shall consider and determine all matters and policies relating to national health legislation, and may invite the co-operation and co-operate with other organizations having the same purpose in view.

Resolved, That the principles of the Owen bill, having for its object the creation of a national Department of Health, now pending in the Senate, and similar bills introduced in the House by Representatives Simmons, Creger and Hanna, be, and are hereby, heartily approved by this Association, and the cordial thanks of the medical profession of the United States, officially represented by it, are hereby tendered to Senator Robert L. Owen, Irving Fisher and their co-workers for their able and unselfish efforts to conserve and promote the most important asset of the nation, the health and lives of its women, its children and its men, properly understood the greatest economic question now confronting our people.

The members of this Association stand for pure food, pure drugs, better doctors, the promotion of cleaner and healthier homes, and cleaner living for individuals, for the State and for the nation. We believe this to be held as equally true by the reputable and informed physicians of all schools or systems of practice.

We welcome the opposition of the venal classes long and profitably engaged in the manufacture of adulterated foods, habit-producing nostrums and other impositions on the people —to the extent of hundreds of millions of dollars annually—and express our sympathy for the well-meaning men and women who have been misled and worked into hysterics by the monstrously wicked misrepresentations of a corrupt and noisy band of conspirators and who are being used as blind instruments to enable them to continue to defraud and debauch the American people.

Medical science is advancing, especially on its life-saving side, with a rapidity unknown to any other branch of human knowledge. It is known of all men that our members in every community in the United States are unselfishly working day and night, instructing the people how to prevent tuberculosis, typhoid fever and the other diseases from which physicians earn their livelihood. Therefore, we welcome and will wear as a badge of honor the slanders of these unholy interests and their hirelings.

These resolutions were later on unanimously adopted by a rising vote.

Dr. T. D. Tuttle, Montana, moved the appointment of a committee to prepare suitable resolutions in regard to the death of Dr. Ricketts, after which the House of Delegates adjourned until Wednesday afternoon.

At the Wednesday session, Dr. Rosalie Slaughter Morton, New York, was granted the privilege of the floor to present the report of the public health education committee. The reference committee on legislation and political action commended the work of the com-

mittee and bureau of medical legislation and recommended that Dr. Reed's resignation be accepted with an expression of appreciation of his untiring, loyal and faithful services. The reference committee on hygiene and public health commended the work of *The Journal* in the direction of a sane Fourth of July. The reference committee on reports of officers submitted a supplementary report on Dr. McCormack's work, endorsing his recommendation of the appointment of a special committee of seven charged with the framing of a bill for a National Department of Health to be presented to the next session of Congress. Following the adoption of this report, Dr. Guthrie, Pennsylvania, moved the adoption of the resolutions presented by Dr. McCormack. This motion was unanimously carried. The committee on awards recommended that a gold medal be given to Dr. Claude A. Smith, of Atlanta, Ga., for an exhibit of experimental researches on hookworm disease and that certificates of honor be awarded to the following exhibitors: University of Minnesota, St. Louis University, St. Mary's Hospital, Rochester, Minn., St Louis City Hospital, Indianapolis Department of Public Health, University of Michigan, Dr. Honwink, St. Louis, special committee on prevention of blindness, New York, Northwestern University, Chicago, St. Louis Medical History Club. The following resolutions were then presented and adopted regarding the death of Dr. H. T. Ricketts:

WHEREAS, Howard Taylor Ricketts, a member of the American Medical Association, lost his life on May 3, 1910, from typhus fever, contracted while engaged in an investigation of that disease in the City of Mexico; and

WHEREAS, He sacrificed himself in the study of a preventable disease and in the interest of the health and lives of the human race; and

WHEREAS, His masterly attainments as a scientific worker in this and other fields rendered his life of inestimable worth to the medical profession and the world at large; therefore, be it

Resolved, That the American Medical Association, in convention assembled, herewith express its high appreciation of the ideals, the efforts and the achievements of this brilliant investigator, and its deep sorrow at the loss of a most brilliant investigator, and its deep sorrow at the loss of a most valued and cherished member; and

Resolved, That we herewith express our sorrow in the death of Dr. Conneffe, of Ohio, who lost his life as a result of infection with typhus fever while working with Dr. Ricketts in Mexico City; and

Resolved, That these resolutions be spread on the minutes of this Association and published in The Journal.

After the election of a number of associate members and the presentation of miscellaneous resolutions, which were referred to appropriate committees, the House adjourned until Thursday morning.

A special meeting of the House was held on Thursday morning to consider the report of the reference committee on amendments to the constitution and by-laws. A large number of amendments, consisting mainly of verbal modifications, were adopted. The last meeting of the House of Delegates was held on Thursday afternoon, the election of officers being the first order of business. The following officers were elected: President, Dr. John B. Murphy, Chicago; first vice-president, Dr. E. E. Montgomery, Philadelphia; second vice-president, Dr. R. C. Coffey, Portland, Ore.; third vice-president, Dr. W. G. Moore, St. Louis; fourth vice-president, Dr. H. L. E. Johnson, Washington, D. C.

When nominations for general secretary were called for, Dr. I. C. Chase, of Texas, nominated Dr. Simmons for re-election in a speech which invoked repeated rounds of applause. In spite of the fact that his resignation had been presented and accepted it was evident that the House of Delegates was determined to re-elect him. After a large number of delegates from different States had expressed their views, Dr. Simmons was unanimously re-elected. Dr. Frank

Billings was nominated for re-election as treasurer by the board of trustees and was elected. The following trustees were then elected to serve until 1913: Dr. W. W. Grant, Denver, Colo., (re-elected); Dr. C. E. Cantrell, Greenville, Tex., (re-elected); Dr. Frank J. Lutz, St. Louis, Mo. The president appointed the following as members of standing committees, the appointments being confirmed by the House of Delegates:

The Council on Medical Education—Dr. George Dock, St Louis, to succeed Dr. E. E. Southard, to serve until 1915.

Council on Health and Public Instruction—Dr. H. M. Bracken, Minneapolis, to represent public health; Dr. W. B. Cannon, Boston, to represent defence of medical research; Dr. Henry B. Favill, Chicago, to represent public instruction; Dr. J. N. McCormack, Bowling Green, Ky., to represent organization, and Dr. W. C. Woodward, Washington, D. C., to represent legislation.

The reference committee on sections and section work recommended the election to honorary membership of Dr. Alfred Saenger, Hamburg, Germany; Mr. J. Herbert Parsons, F. R. C. S., London, England, and Dr. James H. Honan, Berlin. The board of trustees reported regarding the publication of special journals on surgery and pediatrics, and after extended discussion the matter was referred back to the board with full power to act.

Invitations for 1911 were presented from Los Angeles, Cal., and Buffalo, New York, and on ballot Los Angeles was chosen, 61 to 58.

The reference committee on hygiene and public health presented a report condemning the multiplication of optometry boards and the appointment of non-medical and unqualified persons thereon, recommending the formation of a committee on the prevention of blindness and authorizing the appointment of a committee to co-operate with the Department of Commerce and Labor with a view to establishing proper visual standards and tests for pilots. Following the adoption of resolutions of thanks to the Missouri State Medical Association, the St. Louis Medical Society, Governor Hadley, Dr. Dorsett and his local committee of arrangements, the House of Delegates adjourned *sine die.*

The attendance of the House of Delegates was large, 133 delegates being registered. An enormous amount of legislative work was done, the bulk of which was transacted in committees. The revision of the constitution and by-laws and the reorganization of the standing commitees will greatly strengthen the work of the Association and increase the possibilities for improved work. Taken as a whole, it was one of the most important sessions which the Association has held and the prospects for the coming year are better than ever before.

EDITORIAL.

FLORENCE NIGHTINGALE.

With the closing of the life of Florence Nightingale on August 13th, 1910, there ended a career which has left an indelible impression on the world. Few realize that to this one woman more than to any other person in the world is due both the humanitarian changes in warfare and the equally important changes in civil life due to the advent of the trained nurse.

Miss Nightingale was a woman of exceptional ability as an organizer and as a leader of men. Although exceedingly modest, she was a wonderful manager. She accomplished what had never before been successfully attempted—a complete revolution in the method of caring for the sick and wounded in war; she went to the front in the Crimean War with the first organized corps of nurses ever taken to war, and in spite of precedent and prejudice won both privates and officers by her marvellous tact. She mitigated the horrors of hell, winning for herself the well deserved soubriquet of "The Angel of the Crimea."

Miss Nightingale was no seeker after notoriety, no adventuress, no woman with a sinister ulterior motive but a pure love of humanity. Born of rich parents, accustomed to luxury, with the ease of such a life as most rich women like in her grasp, she quietly abjured them all and proceeded from England to the Continent to study nursing as there practiced by certain of the religious sisterhoods and hospitals. Having accumulated what information she could from these, she then organized a corps of women, trained them after the best methods culled from her observation, and proceeded to join the British army then fighting in the Crimea. After doing invaluable work there for the sick and injured of both sides, she returned to England at the close of the war—returning in the same modest way in which she always lived. She refused orders and decorations; she avoided public demonstration in her honor; she refused other recognition of her service than that deep reverence felt by every soldier for his "Angel." No pomp or display appealed to her.

After regaining her health, which had been damaged by her arduous labors at the front, she then set about a revolution in the nursing methods of hospitals and wrought a change which has affected the whole world. To her is due the modern nurse, and more than is known, the modern hospital—for without the latter the former would be crippled, and modern surgery would be almost impossible; while medicine of to-day would still be in the wilds of haphazard work.

And then, to complete a well filled life, she was chief among those to establish the Red Cross organization. Any one of the things she did would have been enough to have brought eternal honor to any one individual—would have caused the thinking world to say: "She has done a full share of the lifting of the world's burdens and done it well," and have brought honor to her name; but her sole thought was to benefit humanity, to alleviate pain; and her life was spent in this endeavor. With no cease from labor, with no thought of wealth or of fame, she labored on until at last her strength was ended and she passed to a reward she could not refuse as she did those of earth.

Loving all the world, she was of all men beloved; laboring long and faithfully, she won her rest, and may her rest be sweet and her dreams of wondrous joys. "She is not dead but sleepeth."

THE TRAINED NURSE.

And what of the child of Florence Nightingale's dearest waking dreams? Of the one who "when pain and anguish wring the brow" proves a "ministering angel?" Of the trained nurse? Let us stop a moment and ask ourselves what we and the world at large owe her?

It has not been so long ago, as the world counts time, when the happiest ending to many a tortured soul would have been to curse God and die, for he was in misery; with no one to even moisten the tip of his tongue as he lay burning in the fires of hell. The help the sick got was almost more deadly than the disease itself (unfortunately this at times holds good even now,) and infectious cases were treated with even less kindness than suffering dumb animals. The drunken Sallie Gamp was the type of nurse on whom the sick had to depend, and the poor invalid was lucky when a nurse could not be obtained.

Owing to the superstitious horror of the unknown disease forces, only persons who had reached a depth of infamy and shame in which a sordid indifference to life had grown were able to be hired, and as a result the drunken, filthy, coarse and calloused remnants of society took on the care of the sick for pay. Of course, there were some good women among them and the various nursing sisterhoods were above reproach after their lights, but the average nurse was bad—ignorant, indifferent and insolent—they added fire to hell and pains to patients.

Compare with these vampires of the past, the intelligent, neat, clean-living, clean-thinking nurse of to-day—the woman who is welcome in any home where she has once been, the one who unhesitatingly faces disease in every form, dangers of every sort to help her patient; the bright and cheerful sick-room companion, and yet the tactful, firm ruler who is our aid in work of every sort. Most physicians see but little of our patients—we rush in, we find the patient brightened up for our visit, rush out again, and do not realize the long strain the poor nurse is on day after day, night after night with querulous patients and anxious families. Answering the same old queries time after time, soothing and quieting nervous and irascible and unreasonable patients, doing hard manual labor which would weary the stoutest muscles, exposed for long periods of time to the gravest infections and with all self-abnegating, self-contained and unselfish. We are apt to forget the strain the nurse is on in our own strain and to blame her at times for our mistakes. It is unfair to remember that we are human and to forget that the nurse is just as human as we are. And at the same time we should give her her due as an invaluable adjuvant, our co-worker in the fight.

A nurse's work is hard. From the time she enters the training school for the two or three years she trains she practices self-restraint. She eschews all the pomp and vanities of this wicked world. She works hard around the clock and then must study in addition. Her time for recreation is little and her holidays short and few. She is taught to hear and to obey in silence. She is blamed for the smallest error and at times becomes the scapegoat for the mistakes of the physician or the surgeon, but still she must suffer in silence. On her falls all the drudgery of the hospital, little of the pleasure and none of the emoluments. And in spite of this she must keep cheerful. She learns in time to get her pleasure in her work or else abandon her training. She has to be exact—the slightest error in technique of preparation may mean the failure of an operation and the death of a patient, or the failure to follow directions may mean the loss of a medical case. But though she must become a machine, she must become an intelligent one, prepared to meet any emergency, clear-eyed and clear-headed—she must use judgment, but it must be *good* judgment, or else she is blamed. She must learn to keep silent. She must do the

disagreeable things we do not like to do. And doing all these, do we as men and physicians do our share? Not always, we fear. For at times we forget that they are not really pieces of machinery but highly trained, sensitive women, and do and say things which hurt their feelings or offend their sensibilities.

We could not now do without them in our hospitals or private work and should realize that they, too, are human and worthy of consideration. Errors they may make, faults they may have, but as a class they are high-toned, high-minded and good—and a very present help in time of need.

PATHIES AND ISMS.

The medical profession is not without faults; we have our black sheep as have other professions, and we are tainted with commercialism to a certain extent in some instances, but as a rule we try to be honest and work for the good of the many instead of the glory of the few. One of our faults has been a marked degree of intolerance for those who practice the psychology of medicine, and as a result we have seen spring up a tremendous number of "pathies" and "isms" of all sorts which have in their turn become equally intolerant of each other and of the regular school of practitioners.

It is a sad commentary on our disregard for people's feelings that so many apparently intelligent individuals are running after various false gods instead of finding relief in legitimate medicine. Each school which has sprung up had a modicum of truth sufficient to strike the one thing needed by a certain group of cases, which thing was not reached by the regular school of practitioners, and so grew and flourished. For instance, homeopathy should never have found a *raison de'etre*, nor should osteopathy, nor Christian Science, but each should have been rendered unnecessary by a wider knowledge on the part of the physician. Christian Science undoubtedly reaches a large class of people with imaginary troubles and had intelligent suggestive therapeutics been used, this sect would have no reason for its being. Osteopathy likewise would have been where it belonged as a branch of applied mechanical therapeutics, a sort of massage, and each physician should be able to apply it intelligently. And homeopathy is gradually changing its spirit to meet a similar change in the regular school. We had better begin realizing that we can learn something from these various sects and start extracting the useful parts from them for our own use. Unless we do this, we shall see a constant increase in their power and number and shall be left in the race. They get a small percentage of the good results and a large percentage of the coin as matters stand to-day.

CHOLERA—YESTERDAY AND TO-DAY.

Among the great scourges of the past cholera ranks high and apparently it has to-day lost little of its ability to decimate an ignorant populace. Yet the disease is one which is easily checked by properly applied precautions. A water-borne disease, proper filtration of a community's water supply will in a short time, as was demonstrated not many years ago in the Hamburg-Altoona epidemic, stop the advance of the disease; and where filtration is impossible, boiling the water will prove an effectual guard against the spirillum of cholera. But reliance on superstition, on prayers and processions, coupled with disregard of hygiene will continue to slay thousands as is now occurring in Russia and in Italy. More men are slain daily with the jawbones of asses than ever Sampson slew, and with less excuse for the slain.

Every one who preaches reliance in words and patter, every one who teaches that wind and not works will serve to stay an epidemic is a menace to the public health and deserves to be placed either among the wilfully malicious or the criminally insane as a public danger—he

should be removed to some place where he can do no harm and be segregated among the other asses where his jawbone will do no ill. This is not meant as an assault upon religion, which is an excellent thing, but on a certain sort of blind reliance in some mysterious power supposed to reside in noise. We do not object to faith, but "faith without works availeth little," and works are what is needed in coping with an epidemic of any sort.

So far over 50,000 deaths have been reported in Russia during this epidemic, from cholera ostentatiously, but ultimately from superstition and ignorance. In Italy the death toll has so far not been so great. It is time that those who are reputed the spiritual leaders of the people awake to the fact that they are responsible for the lives of many innocents and that their methods of dealing with material ills are failures. They should bend their energies to assisting instead of hampering the work of those who are laboring in a scientific manner to control disease. By so doing they could work an immense benefit, for they have vast power. But we suspect that they will continue blind, to lead their sheep and to slay each his thousands with his wagging jawbone.

SOCIETY REPORTS.

Abbeville, no report, 4th month.
Anderson, no report, 6th month.
Aiken, no report, 2d month.
Bamberg, no report, 6th month.
Barnwell, no society.
Beaufort, no report, 6th month.
Charleston, no report.
Cherokee, no report, 2d month.
Chester, no report, 6th month.
Clarendon, no report, 5th month.
Colleton, no report, 5th month.
Darlington, no report, 6th month.
Dorchester, no report, 6th month.
Edgefield, no report, 6th month.
Fairfield, no report, 6th month.
Florence, no report, 6th month.
Georgetown, no report, 2d month.
Greenwood, no report, 6th month.
Hampton, no report, 6th month.
Horry, no report, 6th month.
Kershaw, no report, 6th month.
Laurens, no report, 6th month.
Lee, no report, 6th month.
Lexington.
Marion, no report, 2d month.
Marlboro, no report, 6th month.
Newberry, no report, 2d month.
Oconee, no report, 2d month.
Orangeburg, no report, 6th month.
Orangeburg, Calhoun.
Pickens, no report, 2d month.
Columbia, Richland County, no report, 2d month.
Saluda, no report, 6th month.
Spartanburg.
Sumter, no report, 6th month.
Union, no report, 6th month.
Williamsburg, no report 6th month.
York, no report, 2d month.

On Thursday, July 21st, a new medical association was organized, comprising the counties of Orangeburg, Lexington and Saluda. This association is to have its next meeting at Bamberg some time in February. We are to have a most delicious and improving mental menu, composed of edifying papers by the following learned gentlemen: "Pneumonia," by Levi C. Shecut, M. D.; "Illegal Practice," by Dr. G. T. Roberts, and, of course, an address by the president, Dr. J. J. Wingard. There may be other subjects dished up to us, which we will tell you about later. Everybody must watch *The Journal* for the announcement of that meeting and be sure to come. You'll have as good a time as we had at Batesburg, and now I will proceed to tell you about that.

On July 21st a number of the medical profession met at Batesburg for the purpose of organizing this new association. We had a rousing good meeting in the Drs. Timmermans' reception room. Dr. W. P. Timmerman was made chairman *pro. tem.*, and Dr. J. J. Wingard, of Lexington, secretary *pro. tem.* Drs. R. H. and W. P. Timmerman, in whose office we met, were prepared for us. They had gathered in a number of their rarest and most interesting cases. Dr. Frontis, of Ridge Spring, also brought

along a case of acute pellagra. We examined all those clinics and passed most edifying and illuminating observations upon them. It made us feel as though we were back in the old amphitheatre at college and were again being called upon by the professor in charge for a diagnosis. Let me digress right here and tell you that if a few more of us would bestir ourselves in behalf of our medical meetings and try to make them as interesting as the Drs. Timmermans that our societies would not only be attended for the social feature, but we would feel that it was a real loss educationally to miss a meeting. Let us of Orangeburg County turn over a new leaf and really do something worth while. We can if we will. Who'll help? Pardon that digression. I haven't finished telling you about that meeting. We had fine papers by Drs. Conner, of Saluda; Quattlebaum, of Columbia, and Resir, of Leesville. They will all be published in *The Journal.* Look out for them. Dr. Conner's is on "The Ethical Side of Medicine," Dr. Quattlebaum's on "The Value of Nasal Breathing," Dr. Riser's on "Modern Treatments of Typhoid Fever."

After organizing a permanent association, the following officers were elected: President, J. J. Wingard, of Lexington; vice-president, Dr. J. J. Cleckly, of Bamberg; secretary, Dr. Sophia Brunson, of Elloree. Executive committee: Drs. R. H. Timmerman, of Batesburg; Dr. G. F. Roberts, of Lexington; Dr. J. Matthews, of Denmark, and Dr. Y. H. Dreher, of St. Matthews.

A banquet was given by the Drs. Timmerman at the Batesburg Hotel in honor of the members of the Association and invited guests. Dr. W. P. Timmerman was toastmaster and Messrs. Barrett Jones, L. W. Fox and Solicitor Geo. Bell Timmerman and Dr. Sophia Brunson all made speeches.

After the banquet the Drs. Timmerman took the guests automobiling and showed them all points of interest about the country. Summerland Inn is an ideal place for a sanitarium. The buildings and springs are there, why not turn it into one?

Altogether the first meeting of the new Association was a great success, may there be many happy returns of the day.

SPARTANBURG, S. C., Sept. 2, 1910.

The Spartanburg County Medical Society held its regular monthly meeting August 26th, 1910, with the following members in attendance: Drs. H. R. Black, W. W. Boyd, W. J. and W. H. Chapman, A. D. Cudd, A. R. Fike, L. R. H. Gantt, W. L. Kirkpatrick, W. W. Painter, D. L. Smith and J. R. Sparkman. Dr. W. J. Chapman reported two very interesting cases, one of pregnancy complicated with nephritis, the other pregnancy complicated with typhoid fever and jaundice. These cases were freely discussed. The essayists appointed were not present. It was decided that the October meeting be a Sims meeting and at that time funds be collected to help build the monument to Sims, which the State Association is working for. The members of the General Assembly from the county will be invited to attend this meeting.

L. ROSA H. GANTT,
Secretary.

The Spartanburg County Anti-Tuberculosis League held its annual meeting on August 31st, the following officers being elected for the ensuing year: President, Dr. L. Rosa H. Gantt; vice-president, Dr. J. L. Jefferies; secretary-treasurer, Dr. D. Lesesne Smith. The reports showed that in spite of being very much limited as to funds a good deal of work had been accomplished. In order to be able to broaden the scope of its work and have a name less distasteful to the general public, the name of the League will hereafter be the Spartanburg Health League.

L. ROSA H. GANTT,
Chairman.

CURRENT LITERATURE.

VEIN-TO-VEIN TRANSFUSION OF BLOOD.

By George Morris Dorrance, M. D., and Nate Ginsburg, M. D.

(Journal of the A. M. A., Aug. 13, 1910.)

The artery-to-vein method has been advocated in the last few years by investigators of the subject, notably by Crile. Anastomosis of the vessels is established either by means of a modification of Payr's original tube or by direct suture of the vessels. At the best, the operation is a delicate one and should be performed with a full realization of the risk, both to the recipient and to the donor. The advantages claimed for the employment of the arterio-venous method of transfusion are: (1) That sufficient blood pressure is obtained to introduce the blood quickly from the donor into the circulation of recipient, and (2) that the blood obtained is richer in oxygen content.

The operation itself is beset with many technical difficulties and should not be attempted by any one who has not perfected his skill by repeated experiments on animals. It is of no value in severe infections, in the cachexia of cancer and in tuberculosis. In pernicious anemia and in leukemia, transfusion has disappointed the great expectations which the introduction of the method aroused for the cure of these hopeless conditions. Transfusion is decidedly harmful in cases of purpura hemorrhagica, and whenever hemolysis is taking place.

CHILDBIRTH AFTER APPARENT MENOPAUSE.

L. Buckle, M. D., New York.

(Journal of the A. M. A., Aug. 13, 1910.)

C. H., a well preserved and healthy looking woman, aged 50 years, always menstruated regularly and never had any genital troubles till fifteen years ago. At that time she gave birth to twins, making the number of children seven in all. About a year later menstruation returned but with considerable irregularity; and in another year it ceased altogether. Two years ago, eleven years after the cessation of menstruation, she began to feel out of sorts; she lost her appetite, had nausea and felt weak. She was examined and treated by several physicians, including myself, at various times, but her true condition was not diagnosed and she remained unrelieved. One doctor told her that she had a growth and an operation would be necessary to remove it. The others treated her for gastritis, nervous dyspepsia, etc. She began to worry over her troubles and became much emaciated, anemic and nervous.

One day she came into me and said: "Doctor, I have a cancer and I feel it move around here," pointing to her abdomen. But this time ballottement, fetal heart-sounds, milk pressed out from nipples and other signs pointed to an undoubted pregnancy. She must have been then in the sixth month, for about three and a half months later, I delivered her of a boy of normal size and weight. About a year after this birth, menstruation returned and since appears regularly every month.

Pregnancy eleven years after cessation of menstruation is rather rare. So also is the return of normal menstruation after a cessation of thirteen years. These unusual features seem to justify reporting the case.

DIAGNOSIS AND SURGICAL TREATMENT OF OESOPHAGEAL DIVERTICULA.

(The Old Dominion Journal of Medicine and Surgery, July, 1910.)

Dr. Chas. H. Mayo (*Annals of Surgery,* June, 1910) says that diverticula or pockets, which occur along the oesophagus and lower pharynx, although somewhat rare are so great a menace to health when they do occur that their early recognition is of the utmost importance. The greater number of diverticula are of the pharyngo-oesophageal type and are found in the lower pharynx or upper oescophagus, because at this point, sometimes called the "Lannier-Hackerman area," there is a natural deficiency of muscular support where the pharynx merges into the oesophagus, particularly on the posterior side. Diverticulum is a condition confined to adult life and gives practically no symptoms until difficulty in swallowing is experienced; then a cough may occur from nerve irritation, and pressure from behind the trachea often causes coincident dyspnoea. Dr. Mayo says that operative procedures have been quite simple in all but two cases. Incision is made along the inner margin of the sternomastoid muscle, which is tracted outward and the anterior sternal neck muscles are drawn inward. The lobe of the thyroid is now elevated and the lateral thyroid vain ligated and cut. The sac can usually be identified, but should any doubt exist, a urethral sound can be passed down the pharynx and its point used to elevate the sac into the wound. Care must be used to preserve the recurrent laryngeal nerve from injury. The sac is opened and an examination made of its interior. It is then amputated and the wound closed by a continuous mattress suture, like an intestinal opening (mucosa inside) and a Cushing parallel suture of fine catgut is inserted to reinforce the closure. The wound is washed with a weak solution of iodine and a temporary drain of rubber tissue inserted. In the after care much fluid saline is given by slow enemata and patients are fed twice a day by passing a small stomach tube. Sips of hot water are permitted at rare intervals on the second day. Eight cases of oesophageal diverticula have been diagnosed in the clinic at Rochester. Six were operated upon without mortality. Perfect relief followed. Two have not been operated.

LACTATION IN THE BLAZEK UNITED TWINS.

(Journal Kansas Medical Society, Aug., 1910.)

Considerable scientific interest has been aroused over the phenomena of lactation in the United Bohemian Twins, the Blazek sisters, one of whom was delivered recently of a boy at Prague (mentioned in the Vienna letter April 28). The father of the child is the manager of the two sisters, who has exhibited them to the public for several years. The Blazek twins form a pygopagus; that is, twins joined at the buttocks; all the organs of the truck are duplicated, except that the rectum and the introitus vaginæ are in common. Formerly the sisters menstruated for a four to five day period. During pregnancy the menses ceased in the pregnant woman, while the other sister menstruated regularly until the last two months before the birth. It is remarkable that lactation set in not only in the woman who was delivered but also in her sister. Dr. Basch, who examined the sisters in the Prague Hospital, reports this fact and its explanation in the last number of the *Deutsche Medizinische Wochenschrift.* (Trunececk and Baudouin also discuss the teratologic aspect of the case in the *Semaine Medicale,* May 18.) Basch regards the influence of the sympathetic nervous system on the secretion of milk as small. The role of the sympathetic is especially shown in the transmission of reflexes in sucking or milking which are necessary to a uniform

continuous activity of the mammary glands. The essential specific activity of the mammary glands is independent of the nervous system. According to Basch, the growth of the breasts is occasioned by stimulant substances which are present in the ovary after impregnation, while the initiation of the secretion of milk is brought about by stimulating substances which may be obtained from the expelled placenta. According to his opinion the secretion of milk in the non-pregnant twin is to be explained by the fact that we have to do with individuals living in parabiosis in whom the necessary stimulus to the production of lactation generated by the pregnant sister was carried by the common blood stream to the other sister with positive effect. Whether this idea will be sustained by other investigators remains to be seen.

Dr. Roland Hill's address before the Association of Ex-House Officers of the Toronto General Hospital, Canada, is given in full in the *New York Medical Journal* for July 30th. Dr. Hill says: The borderland between medicine and surgery (the subject chosen,) is one that appeals to all of the different specialists and to the general practitioners as well. That the one great factor that did more to influence medicine in both its medical and surgical aspects was the discovery that germs were the great causative factors of disease. While the discovery of bacteriology has been of so much value from a strictly medical standpoint, it has been of equal if not more value in the development of modern surgery. Conditions that were formerly regarded as belonging strictly to the province of the internist passed on to debatable ground or definitely within the domain of the surgeon. The borderland to-day is represented almost entirely by the line of encroachment of modern surgery upon the field of the internist. It is only a few years since an enthusiastic young surgeon in one of our American medical societies advocated ovariotomy for certain ovarian tumors. There was present one of America's great surgeons—a man whose fame was national. After the young surgeon had vehemently espoused the cause of laparotomy for these conditions, the great surgeon rose to his feet and impressively remarked: "Gentlemen, I have done four of these operations and four little mounds in the cemetery mark the results of my work." The same surgeon died less than thirty years ago of peritonitis as a result of gall-stones, from which he had suffered for many years. At that time his colleagues considered the condition strictly medical. Innumerable lives have been sacrificed by treating by medical means conditions that could to-day be cured by surgery—at the same time, it must not be forgotten that pioneer surgery in the cavities of the body lead also to very many unnecessary deaths.

The two great fields first invaded were the pelvic and appendiceal regions. McDowell had performed his classical operation for ovarian tumor in a cottage in Kentucky more than one hundred years ago. One of the borderland questions of this region that is becoming more and more prominent is that of Cæsarean section. The general advance in medicine is nowhere more marked than in the genito-urinary tract.

Borderland diseases of the upper abdomen are so closely associated with malignancy that that question becomes of supreme moment. According to statistics one-half of all the cancers of the body are gastro-intestinal. At this point it is interesting to note the view advanced by Bland Sutton that cancer is due to a micro-parasite probably taken in with the food and water.

The borderland has presented a gradual encroachment of the surgeon during the past few years. From present observations it will continue as far as abdominal diseases are concerned, but it is extremely doubtful if the line of surgical limitations has not been nearly reached as regards the nervous system and its diseases.

VENEREAL DISEASES IN THE UNITED STATES ARMY.

By Col. L. Marvin Maus, Medical Corps, U. S. Army, Chief Surgeon, Dept. of the Lakes.

(The Military Surgeon, Aug., 1910.)

It is generally conceded by medical officers that there is no one factor or condition in the army which produces more sickness, decreases the efficiency of the men so greatly or affects their *morale* more than disease of venereal origin. In this regard the demoralizing influences of alcoholism and desertion compare but feebly with the direful and far-reaching results of diseases of this character, and there is no military problem which confronts the War Department which is more worthy of discussion or requires more prompt or energetic action.

The history of syphilis begins with the dawn of primitive man, and it has been asserted by some writers on the subject to have been the cause of more deaths than any other disease known to the world. Through its hereditary influences tribes and races have been obliterated and swept off the face of the earth. Many plans for the suppression of venereal diseases have been proposed, but owing to public sentiment, politicians and lawmakers in general have failed heretofore to take up for consideration legislation which would entail recognition of prostitution. Looking at the question as we may, the existing evil in our army is to-day greater than it was a few years ago, and it becomes our duty as medical officers and guardians of the health of the army to devise logical and scientific methods for its abatement, whether popular sentiment be injured thereby or not.

LICHEN PLANUS.

By Charles A. Kinch, M. D.

(New York Medical Journal, July 30, 1910.)

Lichen is a name that was given by the Greeks to the flat mosses which grow on rocks and trees. The word is still used by botanists in this sense. The Greek physicians also applied it to dry papular eruptions upon the skin, and this usage prevailed until fifty years ago. Lichen planus is an acute disease of the skin which may assume a chronic form, characterized by millet sized papules angular in outline, flat or slightly depressed in the centre, light red in color and shiny. It is to be distinguished from psoriasis, chronic eczema, lichen ruber and the secondary eruptions of syphilis. The disease process begins in lichen in the papilla with enlargement of the calibre of the capillary loop and softening and infiltration of the cells of the rete and of the fibres of the derma. Wilson has noticed lichen planus in the proportion of fifty-one cases to 10,000 of all skin diseases. The therapeutics of lichen planus is simple. As a rule dermatologists use in their practice very little arsenic, yet in this disease it had a reputation. Lichen planus never brings about the death of a patient as lichen ruber does. Yet it is tedious in its course and requires in its care great patience on the part of the physician and patient.

THE BONE CALLED "LUZ."

By Fielding H. Garrison, M. D.

(New York Medical Journal, July 23, 1910.)

Among the many shafts of sarcasm which the author of "Hudibras" aimed at the Rump Parliament, the following, if it did not afford "laughter for a month and a good jest forever," may well have furnished "argument for a week" among anatomists:

The learned Rabbins of the Jews,
Write there's a bone which they call Luz
I' the rump of man, of such a virtue,
No force of nature can do hurt to;
And therefore at the last great day,
All th' other members shall, they say,
Spring out of this, as from a seed
All sorts of vegetals proceed;
From whence the learned sons of art
OS SACRUM justly style that part.
Then what can better represent
Than this Rump Bone, the Parliament,
That after several rude ejections,
And as prodigious resurrections,
With new reversions of nine lives,
Starts up and like a cat survives?

Was the sacrum really the bone to which Butler refers, and, if so, how did it come by the name of "Luz?" That the author of "Hudibras" and other writers should have confounded the "Luz" with the os sacrum is also natural enough on account of the name given to the bone by the ancients, and for the reason that the Talmudists assert that the bone extends anywhere from the eighteenth vertebra to the femur. The notion that there were only eighteen vertebrae in the spine was one of the many errors that was perpetrated and propogated by the anatomists of the School of Salernum, who believed that the lumbar vertebrae were part of the cauda equina. From this medieval viewpoint the twelfth dorsal vertebrae should be the bone "Luz." The Mohammedans assumed the coccyx to be the bone "Luz" on account of the small size of the former. With the publication of the "Fabrica," anatomy became a practical working science and the bone of "Luz" was gradually relegated to the limbo of folklore.

ANKYLOSTOMIASIS.

By Clarence L. Cole, A. B., M. D., Prescott, Ariz., Captain Medical Corps, U. S. Army.

(Southern California Practitioner, July, 1910.)

Ankylostomiasis is said to have been known at least 1,500 years before Christ. The description of symptoms and treatment of the disease are given in Ebers papyrus. The disease was rediscovered by Piso, in Brazil, in 1648, and the medical literature of a number of countries appearing between this date and that of the discovery of the parasite by Goeze, in 1872, bears evidence of the knowledge of a more or less general distribution of the disease throughout tropical countries during this period. It was not until fifty-five years later (1843) that the parasite causing this disease was removed from the human intestine by Dubini while performing an autopsy. The disease has received many names; some of these names given by Osler are "Egyptian chlorosism," "brickmakers' anemia," "tunnel anemia," "miners' cachexia" and" mountain anemia." The disease has a special name in nearly every country in which it is found, but the numerous English names that point it out as a miner's disease indicate its prevalence among men following this occupation, and it seems very unlikely that infected miners from other localities have not introduced the disease into Arizona. I have been unable to find any reference to any cases of this disease in Arizona, yet it has been reported from Texas, Mexico and Southern California. It was not known until 1893 that the first case of ankylostomiasis was discovered in the United States. Prior to the description published by Stiles, in 1902, of a new species of hookworm (Necator Americanus,) it was thought that all cases of this disease occurring in man were due to the ankylostoma duodenale (Dubini). Formerly ankylostomiasis was thought to be a water-borne disease, but it is now known that the disease is generally transmitted by the parasite gaining entrance to the body through the skin. Access is rarely, if ever, gained by the alimentary canal. The pathology of ankylostomiasis comprises marked changes in the blood elements and blood-making organs. The facial expression is peculiar to the disease.

LESSONS OF A HALF-CENTURY IN MEDICINE.

By Simon Baruch, M. D.

(The Old Dominion Journal of Medicine and Surgery, July, 1910.)

For many years it has been my custom to present a retrospect of professional observations as occasion presented itself. This practice was initiated when, in 1874, I was called upon as president of the South Carolina Medical Association to open its session with an address. To promote the advancement of our beloved calling, to further the interests of those who follow it, has been and still is the goal of all my striving. Hippocrates has written, "Art is long, life is short, experience fallacious and judgment difficult;" hence the imperative need to add to the general store of knowledge at any cost.

Since the earliest days of practice the idea has forced itself upon me that therapeutics was the least satisfactory branch of medicine. The public for several years has been becoming weary of our polypharmacy. As in the day of Hahnemann, so in this so-called advanced time, the public prefers simple management to this everlasting symptom medication with proprietary preparations which have enormously increased the cost of the prescription. A few days ago a druggist told me of one costing $4.00. When Hahnemann appeared, the public was ripe for any relief from the purging, vomiting, blistering, salivating, starving, narcotising regime. Despite his absurd doctrine he gained so many adherents among the long-suffering people that he thereby won many medical adherents. Little did he think that his infinitesimal medication would lead to the recognition of Vis Medicatrix Naturae—the allopaths justly regarded the infinitesimal doses of Hahnemann as absolutely inert. Dietl, of Vienna, instead of bleeding and starving pneumonia patients, abandoned all treatment, except feeding and cleaning, and his results were great reduction of mortality. In our country Jacob Biglow and Oliver Wendel Holmes had made this preachment to deaf ears. This was the rise of the nihilistic or expectant method of treating disease, which in the early sixties was at its height. When I emerged from the dark days of the war, Austin Flint, senior, and others were teaching expectant, almost nihilistic therapy with vigorous speech and trenchant pen. To meet their opposition, there came upon us slowly the modern drug manufacturers, whose products claimed to make nauseous medicines palatable, and insidiously tempted the doctor as well as the patient. That the medical profession is permitting itself to be misguided by these mercenaries is evident from the advertising columns of our best journals. The confidence of our patients cannot be gained in this advanced age unless we are perfectly frank in acknowledging what Hufland and a few other enlightened men taught long ago. Not the doctor but nature cures. We have made it a life occupation to study the nature, causes and courses of disease, and the action of all remedial agents; we act in the capacity of a pilot who trusts the forces of nature to the tide, the wind or steam to carry his vessel into port, but stands at the helm to *guide* it aright; we know the shoals and tortuosities of the channel. The supervision of the educated physician is as essential as that of a pilot.

AN HISTORICAL NOTE ON THE SO-CALLED LUDWIG'S ANGLE, OR THE ANGLE OF LOUIS.

By Edward H. Goodman, M. D., Philadelphia, Pa.

(Medical Record, July 23, 1910.)

Our slavish following of German thought is well illustrated by the nomenclature given to that prominence of the

thorax corresponding to the juncture of the manubrium with the body of the sternum. It will be a matter of more than passing interest to many physicians to learn that Ludwig's angle is so called not after any German "Ludwig," but in honor of the great French clinician, Louis. "Ludwig" is the German translation of the French name, and so the real identity of the original discoverer of the prominence has been masked. Ludwig's angle is so called in honor of the great clinician (born 1787—died 1872), who is supposed to have described it for the first time. The prominence alluded to commonly commenced under one or other clavicle, and extended downward to near the mamma, or even a little beyond in some cases, its breadth being three or four inches. If any prominence should be called Ludwig's angle, or angle of Louis, it should be the abnormal prominence seen as the result of disease, and not the normal joint.

THE VALUE OF TEST MEALS.

(Medical Record, July 23, 1910.)

J. Russell Verbrycke thinks that there are many who either undervalue the test meal or are prejudiced against it. One can by painstaking history and careful physical examination make a diagnosis in a number of the anatomical diseases of the stomach, but one is aided and has his opinions confirmed from examination of a test meal. One can by this means arrive at the extent of the functional changes which are coincident with the anatomical disease. In the purely functional changes one can only obtain a definite idea as to the degree of abnormality by means of the test meal. The use of the stomach tube in addition to recovering material for examination, can tell if there is any organic stricture or spasm of the lower end of the esophagus or cardia. It can also determine the length of time food remains in the stomach, the condition of motility, the presence or absence of pyloric obstruction, and whether the patient eats hastily, without proper mastication. There are certain points the forgetfulness of which may lead to skepticism in regard to the value of the test meal. Conclusions cannot always be based on the results of one meal. A uniform meal should be employed. One should recover all that can easily be obtained in order to form a relative idea of the amount of secretion and to avoid getting a small amount from the cardia which may differ from the rest of the contents. Microscopical and macroscopical, as well as chemical, examination should be made. The author gives a summary of the findings and their importance in the various stomach affections and, in conclusion, makes a plea for more frequent test meals in the diagnosis of stomach affections; believing that by giving due consideration to and properly correlating all the findings we are arriving at greater exactness, eliminating much of haphazard diagnosis and therapy, and are putting the subject on a much more rational basis.

INFLUENCE OF A DIET WITHOUT SALT IN A CASE OF HABITUAL DEATH OF THE FOETUS.

Prouvost gives the history of a case in which the first two pregnancies resulted in normal, living children, but in whom there followed a succession of dead children. The mother desired living children, and was very much depressed by her inability to have living ones. The dead children were swollen and edematous. The author thought that he would try removal of salt from the diet of the mother, who was very fond of salt, on the theory that too much salt was retained in the blood of the foetus. He made the patient eat meals that were specially prepared without salt, eating only dinner with the family. This was continued for some two years, when the patient brought

forth a living, healthy baby. Two years later the woman became pregnant again, and the diet was repeated with a similar result. If results can speak for the cause of such a condition, it seems evident that the mother was taking too much salt, and that, for some reason, it was retained by the foetus in excess, producing an intoxication.—*Bulletin de la Société d'Obstretrique de Paris.*

MINOR THERAPEUTIC ITEMS.

Mercury in Tuberculosis.

(Therapeutic Medicine, July, 1910.)

Dr. Barton Lisle Wright, of the United States Navy, reports continued success in the treatment of tuberculosis by deep muscular injections of mercuric succinimide or of the bi-chloride. In the *New York Medical Journal* for March 19, 1910, he describes the method. In 1908 he effected the cure of eighty-three patients and improved 89 per cent. of the whole number treated. Of twenty-four cases of secondary ulcerative tuberculosis of the larynx, twenty patients have been cured. Arsenic enhances the effects of the mercury.

Nitroglycerin.

Loomis finds that nitroglycerin has no effect in lowering pathologic blood pressure. Nichols (*Practitioner*) suggests small doses of thyroid extract in the gradually rising blood pressure of old age.

Osler thinks that we use nitroglycerin in too small doses and recommends ten minims of the 1 per cent. solution under some circumstances. We are not inclined to endorse such dosage, for however little effect it may have on pathologic blood pressure, nitroglycerin is likely to provoke decidedly unpleasant by-effects which are too well known to require mention.

Vaccine and Glycerin.

Vaccine, if kept in contact with glycerin for more than two weeks loses some of its activity. Moreover, if too diluted with glycerin, its efficiency is also reduced. These facts explain many of the failures to secure "takes." Only fresh glycerinated vaccine should be used. (Goldschmidt, of Strasburg.)

Poisonous Effects of Alcohol.

Crothers summarizes the poisonous effects of alcohol as follows: It dehydrates the tissues, paralyzes the sensory centers and diminishes vital power and capacity to resist disease and degeneration. The defences and conservative reserve powers of the body are weakened. Mortality is thus increased by it, liability to disease intensified and capacity for restoration recovery lessened. The capacity to judge and reason is weakened by its use. The highest and last developed faculties of the brain, namely, the sense of right and wrong—the ethical conceptions of duty and responsibility—are the first to become anethetized and paralyzed.—*J. A. M. A.*, February 19, 1910.

Boas condemns carminatives and antifermentatives in the treatment of flatulence as irrational and useless.

Cause of Belching of Gas.

Much of the "gas" eructated by gastric patients is the result of swallowing air and not the result of fermentation. It is known [?] now that actual fermentation in the gastrointestinal tract is rare and productive, when it does occur, of no such quantities of gas as these aerophagic patients expel. These facts should be borne in mind in treating such patients. They should be instructed to eat carefully, since some of the air is swallowed then, and to guard against unconscious swallowing of air between meals.

How to Aspirate in Pleura Painlessly.

Puncture of the pleura with a large needle for the purpose of diagnosis or aspiration may be made comparatively easy for the patient, if, first, a drop of pure phenol is allowed to whiten and anesthetize the skin at the site of the proposed puncture, after which 10 minims of a 2 per cent. cocain solution are thrown under the skin with a short, fine hypodermatic needle at the phenolized point and into the tissues which the large needle is to traverse. Wait then for two or three minutes before proceeding further.

In Diabetes.

In diabetes strontium bromide in thirty grain doses t. i. d., enjoys an excellent reputation. It will reduce the sugar and ameliorate the symptoms. Arsenic is, of course, largely used, as is codeine, too, in one-quarter grain doses t. i. d., increased by one-quarter each day until six grains are given daily. When combined with atropine, the sugar is more rapidly decreased and the acetons more certainly cleared up.

Don't give stimulating expectorants in the first stage of bronchitis, as is so commonly done. Give a few drops of wine of ipecac or wine of antimony every three hours. Apomorphine is useful, too, in the first stage. It will not cause vomiting when given by the mouth in doses of say gr. 1/50. When expectoration sets in drop the sedatives and resort to the stimulating expectorants.

Ether in Cocaine Poisoning.

Engstad, of Grand Fords, N. D., reports (*J. A. M. A.*, March 19, 1910,) gratifying results from the use of ether in the treatment of cocaine poisoning. He gives it by the drop method and has saved seemingly hopeless cases. Mild surgical narcosis is usually necessary, though a less degree may suffice. It stimulates the heart and the respiratory system almost instantly. The pulse becomes fuller at once and of normal tension. Engstad finds the method far prompter than the administration of strychnine and morphine.

Massage in Coccygodynia.

Leonard W. Ely, of New York, has obtained uniformly successful results in the treatment of coccygodynia through massage of the coccyx, with the forefinger in the vagina and the thumb over the coccyx. The bone is moved backward and forward and the soft parts are moved about on the bone. The manipulation is begun very lightly and gradually increased in force as the patient becomes less sensitive. Two or three treatments usually suffice, the improvement being almost instantaneous. Intervals between treatment should be two or three days.—*J. A. M. A.*, March 19, 1910.

BOOK REVIEWS.

Practical Medicine Series, 1910, Vols. *I., II., III., IV.*—(Practical Medicine Series, 1910.—Price $10.00 for the Series. Individual volumes differ in price. Vol. I., $1.50; Vol. II., $2.00; Vol. III., $1.50; Vol. IV., $1.25.)

One of the most compact digests of medical literature obtainable, this series is also one of the most complete. It is a solid extract of the world's best medical journals and contains the most important active principles with the least amount of residue. The arrangement, with each subject under a separate division in a volume to itself makes it most convenient to the reader as a work of reference. For instance, Vol. I. treats of general medicine, with Billings and Salisbury as editors; Vol. II. of general surgery, with Murphy as editor; Vol. III., of eye, ear, nose and throat, with Wood, Andrews

and Head, editors, and Vol. IV. of gynaecology, Dudley and Bachelle, editors.

The whole series is under the general editorial charge of Head and Mix. The series consists of ten volumes, appearing one a month, and each volume covering the advances in that particular division for the year preceding the publishing of the volume.

The series is published by the Year-book Publishers, Chicago, Ill., and as the publishers claim, is gotten out primarily for the general practitioner but arranged under different volume heads for the purpose of convenience. It is an admirable arrangement and the series is worth having on one's book shelves.

Hookworm Disease—Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis and Treatment—By Geo. Dock, M. D., and Chas. C. Bass, M. D. C. V. Mosby Company, St. Louis, printers.

In the 250 pages of this volume Dock and Bass go over the ground of hookworm diseases pretty thoroughly, tracing its history from the Ebers Papyrus to the present day, and covering pretty generally the divisions of etiology, pathology, symptomatology, diagnosis, prognosis, prophylaxis and treatment. The book, which is profusely illustrated, does not add much to the existing known facts about the disease, but does put into readable and concise form the sum of to-day's knowledge of the subject. It summarizes the known facts and saves much time and energy to any one attempting to wade through the voluminous literature on the subject. To the country practitioner in the South, the volume should be of special interest. It is well printed, quite readable and fairly concise, though not a compend by any means. Many of the points are well elaborated. It will meet nicely the demands of a large number of men too busy to read large numbers of journals and yet anxious to inform themselves on this subject.

Therapeutic Action of Light—By Corydon E. Rogers, 382 Second Avenue, New York. Published by the author. Price, $3.50.

In this volume the author makes some claims for light theraphy—the light being generated with a special lamp of the author's designing—which are startling, to say the least. With his lamp generating his "RHO" rays he claims wonderful penetrative and selective powers for the light, the rays penetrating the deepest and densest tissues and working marvels in cures. While not doubting the Doctor's sincerity, we feel that he is too sanguine, and cannot hope that any one agent, such as light from any lamp of special design, can prove a panacea. When one finds it claimed that "RHO" rays will cure or benefit such a variety of diseases as eczema, acne, tuberculosis, both cutaneous and of the deeper structures, pleurisy, bronchitis, bronchietasis, rheumatism, syphilis, gonorrhoea, conjunctivitis, optic atrophy, endometritis, salpingitis, chronic meningitis, chronic appendicitis, goitre, diabetes mellitus, pernicious anemia, chronic constipation, etc., etc., it is time to become skeptical and to consider that the author was somewhat over enthusiastic. Probably the "RHO" rays are good in certain conditions, but it is well to remember the extravagant claims made for the Roentgen rays at one time and to consider the probability that the "RHO" rays are much over rated by their enthusiastic sponsor. So far the case in favor of the "RHO" rays is "non-proven," (at least in this book.) according to the judgment of the reviewer.

Nephrocoloptosis—A Description of the Nephrocolic Ligament and its Action in the Causation of Nephroptosis, with the Technic of the Operation of *Nephrocolopexy*, in which the Nephro-

colic Ligament is Utilized to Immobolize both Kidney and Bowel—By H. W. Longyear, M. D. Published by C. V. Mosby Company, St. Louis, 1910.

This little volume is a treatise on certain anatomical facts observed by Dr. Longyear and used by him in correcting that most difficult condition known as *Nephrotosis.* Dr. Longyear in his surgical work discovered that though there may be a coloptosis without a nephroptosis, there never was a nephroptosis without a coloptosis. This led to certain anatomical studies and to the discovery of an intimate connection between the capsule of the kidney and the colon. This connection has been noticed frequently by other men, but has always been reckoned heretofore as a pathological condition instead of a physiological one.

Dr. Longyear takes a position (and his point seems well sustained), that the displacement of the kidney is probably secondary to the displacement of the intestine and that the constant recurrence of nephroptosis after operation is due to the tug on the capsule of the kidney by the prolapsed large intestine. Consequently, in order to correct a displaced kidney it is necessary at the same time to correct displacement of the large intestine. In order to do this he utilizes the tissue connecting the capsule of the kidney and the colon as an anchor for both organs at once. We do not like to say that he is killing two birds with one stone, as that might be misleading, but he is correcting two faults at one operation. The idea is well worth close observation and a more general application. Operations for the relief of floating kidney have up to this time been one of the most unsuccessful of the many operations done, for the simple reason that so large a per cent. of the cases return for operation with their symptoms unabated. After reading Dr. Longyear's book it is easy to understand why this should be so, and the reason is made especially plain by the numerous anatomical plates which he presents. After giving an outline of his observations, he describes his operation and also goes somewhat into the method of diagnosing floating kidney.

The book is an addition to any surgeon's library, as it is well printed, well bound, and at the same time full of interesting points and presents a new idea in surgery. The author makes no extravagant claims but modestly presents his views and his reasons for holding these views.

A Textbook of Pharmacology and Therapeutics; or the Action of Drugs in Health and Disease—By Arthur R. Cushny, M. A., M. D., F. R. S., Professor of Pharmacology in the University of London; Examiner in the Universities of London, Manchester, Oxford and Leeds; formerly Professor of Materia Medica and Therapeutics in the University of Michigan. Octavo, 744 pages, with 61 engravings. Cloth, $3.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1910.

The fifth edition of Cushny's textbook on Pharmacology and Therapeutics keeps up to the high standard set by the former editions. The reason for another edition is given in the preface—that the advances made in pharmacology in the last few years have necessitated changes in a number of chapters, and so the opportunity has been taken to revise the whole thoroughly. There has been a marked change in many of the ideas concerning the application of drugs within the past few years. Cushny's textbook had kept pace with these changes and his latest volume is up to date in every respect. The book is in some ways more fitted for the use of the student than for the busy practitioner of medicine and is even more suited to the pharmacist than either to the student or practitioner. The arrangement of the

various subjects would probably be convenient after one becomes familiar with the book, but for the sake of practical therapeutics it is a little inconvenient. However, this does not detract from the value of the publication as a work of reference nor from its completeness. We would sum up by saying that the work is valuable, is concise, complete and up to date.

SURGICAL SUGGESTIONS.

The too prolonged use of a drainage tube in an empyema wound may be the cause of a persistent sinus.—American Journal of Surgery.

When acne of the back does not respond to treatment, try a few applications of long strokes with the Paquelin cautery. The results are often excellent.—American Journal of Surgery.

In the presence of a swollen, ulcerated tonsil or of swellings in the pharynx of some duration, look for evidences of leukemia.—American Journal of Surgery.

Bilateral, large, smooth swellings of the tonsils should arouse the suspicion of Hodgkin's disease.—American Journal of Surgery.

A deep swelling in the gluteal region developing after a fall is apt to be a hydropic bursa—there are several bursae among the glutei.—American Journal of Surgery.

Boston, Mass., August 18, 1910.

Editor *Journal of South Carolina Medical Association:*

Dear Doctor: The second annual meeting of the American Association of Clinical Research will be held in Boston on September 28 and 29, 1910.

Some very valuable contributions on researches in medicine and surgery, in prophylactic and anaphylactic medicine, in mental medicine, in radiotherapeutics, in metabolism, etc., are promised. There will also be a public meeting.

Please publish this information in the earliest issue of your journal.

The cause of the Association, to secure the true facts and principles of medicine and to advance medicine on the basis of truth and not of whim, is the cause of every true physician. Every physician is most cordially invited to become a member. Your support and that of your friends will be highly appreciated. Applications and programme will be forwarded on request.

Fraternally yours,

James Krauss,
Secretary.

FROM THE LAY PRESS.

KILLS HIMSELF WITH HAMMER.

Old Negro Accidentally Strikes Himself on Leg.

(From The State.)

Special to The State.

St. Matthews, August 15.—Ben Butler, a negro railroad section hand, lost his life in a most peculiar manner to-day. While working with his hammer he missed his mark, the entire force of the blow falling on his leg in the vicinity of the knee. Butler suffered great pain and lost considerable blood. In about an hour he died. The blow is supposed to have so completely shocked the entire system that it caused a paralysis of the heart.

Butler had been in the constant service of the railroad for about twenty-seven years and was considered one of its most faithful employees. He was a negro and was of advanced age.

DR. WM. FRANCIS LEONARD.

Special to The State.

Simpsonville, August 15.—Dr. William Francis Leonard died August 9 at his home in Reidville, after an illness of several weeks. He was in his 50th year, and leaves a widow and four children. The funeral was conducted on the afternoon of the 10th by the Rev. B. P. Reid, and the body was buried with Masonic honors, in the presence of hundreds of friends in the old Antioch Churchyard.

DEATH OF DR. A. W. CALHOUN.

Noted Atlanta Specialist Succumbs to Long Illness.

(Charleston News and Courier, Aug. 22.)

Atlanta, August 21.—Dr. Albert Welborn Calhoun, well known throughout the South as a physician and occulist, died at his home here this afternoon, after an illness of several months. After serving throughout the War Between the States in the ranks of the Confederacy, Dr. Calhoun studied medicine in this country, and then spent three years in Vienna and Berlin, studying diseases of the eye, ear, nose and throat.

For forty years he practiced his profession in Atlanta and his patronage was drawn from every Southern State. Dr. Calhoun was born at Newman, Ga, April 16, 1845.

He leaves a widow and four children, Dr. Phinizy Calhoun, Mrs. James Oglesby, Jr., and Andrew Calhoun and Miss Harriet Calhoun, all of Atlanta.

A sister and brother also survive him, Mrs. John Hill and Judge Andrew E. Calhoun, of Atlanta.

By his practice Dr. Calhoun amassed a fortune of more than $100,000, and was most liberal in his donations to charity. Notwithstanding his large practice, probably a third of Dr. Calhoun's patients were treated without remuneration. "Never in all my practice," he once remarked to a close friend, "have I failed to give attention to a patient because he did not have the dollar."

The funeral will be held to-morrow afternoon at 4 o'clock. Six brothers of Mrs. Calhoun will be the pallbearers.

COLUMBIA PLEASURE RESORT OPENED.

Columbia, August 21.—Special: Lake Ridgewood, one of the few artificial lakes in South Carolina, with pleasure resort, including boating and other sports, has been opened.

FLORENCE NIGHTINGALE DEAD.

Famous Crimean War Nurse Dies in Ninety-First Year.

Charleston News and Courier, Aug. 15,)

London, August 14.—Florence Nightingale, the famous nurse of the Crimean war and the only woman who ever received the order of merit, died yesterday afternoon, at her London home. Although she had been an invalid for a long time, rarely leaving her room, where she passed the time in a half recumbent position and was under the constant care of a physician, her death was somewhat unexpected.

A week ago she was quite sick, but then improved, and on Friday was cheerful. During that night alarming symptoms developed and she gradually sank until 2 o'clock Saturday afternoon, when an attack of heart failure brought the end.

Her funeral will be as quiet as possible, in accordance with her wishes. During recent years, owing to her feebleness and advanced age, Miss Nightingale had received but few visitors. On May 12 last she celebrated her 90th birthday and was the recipient of a congratulatory message from King George.

Florence Nightingale was born on May 12, 1820. She was the first woman to follow a modern army into battle as a

nurse, and in the Crimean war gained the title of "Angel of the Crimea." She studied nursing under the Protestant sisters of Mercy, at Kaiser-Werth, Germany, and returned to England when the Crimean war broke out. She organized a corps of volunteer nurses, whom she led into the field, and was especially celebrated for her noble services at Scutari.

At the close of the war she was enabled by a testimonial fund amounting to $250,000 to found an institution for the training of nurses, the Nightingale Home at St. Thomas Hospital. She was also the means of calling attention to the unsanitary conditions of camp ships. In 1908 she received the freedom of the city of London.

King Edward bestowed upon her the Order of Merit, the most exclusive distinction in the gift of the British Sovereign. The membership of the Order is limited to 24, and it includes such men as Lord Roberts, Lord Wolesley, Field Marshal Kitchener, James Bryce, Prince Yamagata and Admiral Togo.

There is a strong feeling among the general public, and particularly among the military men, in favor of a public memorial for Florence Nightingale. There is little doubt, however, that her expressed wishes in this connection will be taken into consideration.

Not even the death of a royal personage could have called forth more universal expressions of regret and tributes of affection than appear in the English papers.

AUSTRIA STRIVING TO CHECK PELLAGRA.

Authorities Adopting Heroic Methods to Stamp Out Disease in That Country.

(From The State.)

Washington, August 19.—Heroic methods have been taken in Austria to stamp out pellagra, which there has assumed proportions similar to that in the Southern States of this country. Henry Studnichka, of Vienna, commercial agent, has sent a statement to the Department of Commerce and Labor as follows:

"In order to stop the popular use of infected cornmeal, which is held responsible for the disease, the Austrian Government has constructed in Southern Tyrol six modern steam rye bakeries, which are under the direct supervision of the Governor of the province. The city governments of this section also supervise and inspect all private bakeries."

THIRD DISTRICT MEDICOS.

Programme Announced for Meeting at Clinton September.

(From The Charleston News and Courier. September 2, 1910.)

The News and Courier has received the programme of the Third District Medical Association, which will be held at Clinton on September 8. The District comprises the counties of Abbeville, Greenwood, Laurens, Newberry and Saluda. Following are the officers of the Association:

G. A. Neuffer, M. D., president, Abbeville; Rolfe E. Hughes, M. D., vice-president, Laurens; G. P. Neel, M. D., secretary, Greenwood.

The programme follows. Meeting called to order at 8.30 P. M.:

Part I.

Calling roll and enrolling members.

Reading minutes.

Report of committee on constitution and by-laws.

Clinical cases presented.

Part II.

"Brain Surgery," W. C. Black, M. D., Greenville, S. C.

"The Uses of Apomorphia," R. B. Epting, M. D., Greenwood, S. C.

"A Trip to the Mayos," G. P. Neel, M. D., Greenwood, S. C.

"Arteriosclerosis and Its Treatment," James M. Kibler, M. D., Newberry, S. C.

Papers will also be read by E. A. Hines, M. D., Seneca, S. C.; E. W. Carpenter, M. D., Greenville, S. C.; Curram B. Earle, M. D., Greenville, S. C.; W. P. Turner, M. D., Greenwood, S. C.

Papers and discussions open to all.

GENERAL NEWS.

POLISHED RICE AND BERIBERI.

(Journal of the A. M. A., Aug. 20.)

In the Philippines in all specifications for commissary stores where rice is required for either the army or navy, unpolished rice is specified. Polished rice is no longer used as a diet in either the army, the navy or in the public institutions of the islands. The supposed relation of polished rice, as a diet, to the development of beriberi is the direct cause of this ban. In so far as statistics are available and reliable, it would seem that since the introduction of improved rice-milling machinery into the Philippines the amount of beriberi among the natives has increased. Of course, due allowance must be made in these considerations for a great number of cases reported as beriberi, which are, to say the least, of a doubtful diagnosis. Since beriberi has been so much in the limelight of recent years in the Orient, it would hardly be an exaggeration to say that there has been a tendency to include various nervous disturbances under the heading of beriberi which in reality should have been classed as something else. In spite of this, a number of competent medical men, both in the Philippines and in other parts of the Orient, have observed an increase in the number of cases of this disease since polished rice has supplanted the hand-milled rice as the staple article of diet. In many sections the natives have early shown a preference for polished rice. It is rather noteworthy also that beriberi is decidedly more frequent among that class of natives whose staple and principal article of food is polished rice, and that in those remote regions where the Filipino still uses the unpolished rice, although rice is the principal article of diet, beriberi is relatively rare. These observations go hand in hand with the observations of Dr. de Haan that, in Netherlands India, it has been found beriberi could be kept very much in abeyance by adding to the white rice diet a form of green pea, which is called *"katchung idj-ju"* and is said to be rich in phosphorus, as well as with the results of the experiments of Dr. Frazier and Dr. Stanton at the laboratory for medical research at Kuala Lumpur, Federated Malay States, who find "that fowls fed on highly polished rice suffer, within from four to six weeks, from a condition of inflammation of the nerves, which closely resembles and may be identical with the condition of the nerves found in beriberi in human beings." All these things taken together suggest some indication of the eitology of the disease. It seems evident that beriberi is primarily a disease of nutrition and metabolism, and in local medical circles by many it is considered doubtful that beriberi is caused by an organism. Perhaps the most widely accepted view is that advocated by Dr. Frazier, who points out that in a steady diet of polished rice, as is often the case here in the Orient, the individual fails to obtain sufficient nourishment for the peripheral nerves. He showed that the unpolished rice grain contains beneath the skin or pericarp a layer of cells rich in fat and phospohrus and that the central portion of the rice grain consists entirely of pure starch. In polished rice the outer fat-containing layer has been polished away. Rice prepared in the ordinary native fashion by hand-milling contains a large

amount of these oil-bearing layers. It is, moreover, the experience of the Bureau of Health of the Philippine Islands that a little meat or even the rice polishings mixed with a diet of white rice will lead to an improvement of beriberi patients in the early stage.

CHOLERA MAY PREVENT MEDICAL MEETING.

The meeting of the International Gynecologic Congress, which was to be held in St. Petersburg in September, may not convene in that city on account of the epidemic of cholera prevailing there. Dr. Charles A. L. Reed, Cincinnati, president of the American committee and Government delegate to the meeting, has cabled the Russian committee that if the meeting cannot be held there the American profession will welcome the organization to this country. The meeting of 1908, which was to be held in St. Petersburg, was deferred for the same reason.

SOUTH CAROLINA.

Personal—Dr. Charles Speissegger, Jr., Charleston, has received his commission as army surgeon with the rank of first lieutenant.

Pasteur Institute—The Board of Health of Charleston, has opened a Pasteur Institute for the treatment of rabies. It will be in charge of Drs. John M. Green and George M. Mood.

COLUMBIA HOSPITAL ENLARGED.

(The Charleston News and Courier, Aug. 24.)

Columbia, August 23.—Special: In line with other improvements in this city, announcement is made that new buildings, to cost $45,000, will be added to the Columbia Hospital.

SAYS AUTOMOBILE CAUSES MANY ILLS.

Rush of Air, When Speeding, Injurious to Nose and Throat, Specialist Asserts.

"Automobile Face" a Result.

Chest, Nose and Feet Should Be Protected—Vapor and Dust Imperils Non-Riders, Dr. Delavan Declares.

(New York Times, August 25, 1910.)

As his contribution to the proceedings of the annual meeting of the American Larynological Association recently held in Washington, D. C., Dr. D. Bryson Delavan, the throat specialist of this city, read a paper on "The Influence of the Use of the Automobile Upon the Upper Air Passages." He chose this subject for the reason, as he explained, "if the experience of other occupations which are known to be injurious to the air passages is any criterion, it is time that we had undertaken to consider the influence of the automobile."

Dr. Delavan's paper appears in the current issue of *The Medical Record.* Here are some extracts from it:

"The automobile may affect both him who uses it and him who does not. The exposure to one who rides in an open vehicle may bring about effects which would not endanger the one riding in a Limousine. The chauffeur may also be exposed to dangers peculiar to his position.

"As to the man who walks, it is his part to inhale the fumes which poison the atmosphere of our best avenues and to either be driven from his home by the noise of the autos or choked by the dust which is raised by them and blown in his direction.

"The factors which may work injury may be divided into two groups: First, conditions relating to the air itself, and, second, impurities carried by or sus-

pended in the air. The first includes temperature, air currents and air pressure; the second, dust and smoke.

"Sudden and violent changes of temperature are often encountered by the motorist. Exposure to strong draughts is also a common experience, the draughts being due to natural air currents or to the rapid motion of the car. Where the car is speeding in the face of a breeze the resulting increase of air pressure must be considerable.

Lungs Are Affected.

"Sudden change of temperature or rapid radiation of body heat due to exposure to air currents may cause chill, and, indirectly, the latter's well-known results upon the breathing apparatus. Increased atmospheric pressure, especially when combined with cold, must of necessity exert important influences upon the respiratory region, from the nasal cavities and their communicating passages to the ultimate vesicles of the lungs. Examples of this are common * * * A rate of thirty miles an hour constitutes a stiff breeze, while sixty miles represents a gale. These facts we know, and yet easily forget in the exhiliration of the ride.

"Studies made with regard to the actual resistance of the air in speeding give interesting results. It is stated that at speeds below twenty miles an hour the effect of wind resistance is too slight to be measurable. Considering surfaces at right angles to the normal plane of travel of the automobile, resistance begins to show at about fifteen miles an hour. It increases slowly, reaching about two and a half pounds a square foot at thirty miles an hour. Higher speed results in rapidly increasing the rate of resistance, until at sixty miles an hour the pressure is about thirteen pounds. At ninety miles it has increased to about twenty-nine pounds.

"If these observations are correct, air pressure in connection with the use of the automobile is not a negligible factor, especially when related to its influence upon the air passages. Of course, it must be remembered that the rate of pressure may be greatly increased by adding the force of a head wind to the speed of the machine. Thus, a speed of thirty miles against a twenty-mile breeze would create a fifty-mile pressure.

Even Healthy Lungs Suffer.

"While there may be some conditions of the lungs in which exposure to a moderate increase of air pressure for a limited amount of time would be beneficial, there must be many cases in which a great increase of pressure, a pressure long continued, would result in injury, even to a healthy lung. In certain pathological conditions * * * the risk is obvious.

"The second injurious factor is the impurities which may be inhaled with the inspired air. These consist of dust, of smoke and of other matters, among which may be mentioned plant products and small insects. The deleterious effects of dust upon the air passages are obvious. Those engaged in dusty occupations, such as emery grinding, certain kinds of stone-cutting, the handling of furs and the manufacture of certain powders and fabrics, almost invariably suffer. Smoke also irritates them, and the smoke of the auto is especially irritating.

"With regard to the equipment of the motorist every conceivable appliance and convenience is provided for him. This is especially true of protections for the eye, which are supplied in great variety. In considering this, however, it at once appeals to one as strange that protection of the breathing apparatus against dust and severe winds seems to be neglected.

"I have searched many shops, but have never yet found a satisfactory respirator, nor do I know anything in recent scientific literature bearing upon the subject. Almost the single exception to this

statement is the face guard used in racing for protection against the wind.

"The introduction of the wind shield has resulted in modifying the effect of wind currents with considerable success. Roe states that since it has been more generally used diseases of the nasal sinuses among autoists have been distinctly less common.

"Shurly calls attention to the fact that habitual speeding develops the so-called 'automobile face,' a characteristic of which is the open mouth. Such persons, he believes, are particularly liable to infections.

Gasoline Fumes Are Unhealthful.

"While some may doubt the harmfulness of the emanations from the exhaust of the automobile, it is hardly possible to suppose that they can be entirely without effect. Even to healthy membranes their presence in the air is consciously annoying. Where the mucous linings of the air passages are already, for any reason, in a sensitive condition, there is no question * * * that the automobile fumes have caused painful annoyance at the time and in some cases long continued and severe after irritation. This is often observed in cases of ear trouble, due to Eustachian catarrh, while patients suffering from asthma, bronchitis, tuberculosis and the like are undoubtedly affected by it.

"Without question mucous membranes already irritated are more especially liable to infections of a general nature; even supposing the smoke and gases from the auto to be sterile, their ultimate contributory effects may easily become important, particularly when combined with the notoriously microbe-laden dust of city streets.

"Theoretically considered, the use of the automobile should be productive of a decided increase in the average of respiratory ills. Whether or not it has actually so resulted is a question. Taking up the causes of injury, we will first refer to chill. This may be acquired through unsuitable or insufficient clothing, or through clothing improperly applied. Not only should the body be protected, but the limbs should be carefully covered, especially in open motors. A coat otherwise warm may be cut too low in the collar.

Dangerous to Expose Throat.

"The idea that undue exposure of the neck and throat tends to strengthen the parts is a popular fallacy. No such custom prevails with the Eskimos and others of exposed life dwelling in cold latitudes. No part of the body would seem to demand more careful protection than that adjacent to the top of the sternum, where center the most important blood vessels of the body, many of them within short distances of the outer world.

"A coat which does not properly protect the throat is like a roofless house. Any one who has skated or has sailed an iceboat in very cold weather, or who has had experience in mountain climbing, will readily understand this.

"In motoring, neither extreme cold nor great altitudes is necessary to bring about conditions which rapidly lower the body temperature.

"As with the neck, so with the feet. Low shoes, unprotected ankles and want of rugs may quickly work disaster. Some of the head coverings used are admirable. Others are exceedingly bad, comfort and safety being sacrificed to appearance, with no attempt to protect and shield the face and neck.

"The subject of proper underclothing must also be considered. The wearing of an abdominal band is considered by many experts a great protection against chill.

"It is easy to become chilled in an automobile when one enters it after leaving a warm room, even when well protected with clothing. Still worse to ride in an open machine in the country, fresh from an overheated train and with thin clothes. This latter situation sometimes confronts the city consultant when he is called out of town.

Chauffer in Most Danger.

"Apparently the worst case is that of the chauffeur who, in the effort to replace a tire or repair some injury, works himself into profuse perspiration and then upon the driver's seat makes up lost time against a cold breeze. Such exposure should be prolific of throat and lung trouble. As a matter of fact, it does not seem to be. This may be accounted for by the youthful vigor and personal power of resistance of those who engage in the work of motor driving, as well as by the health-giving effects of a life of abstinence and of activity in the open air.

"In a paper recently presented in Philadelphia on the effect of the automobile upon the heart, Dr. Tyson maintains that many cases of cardiac disease are markedly benefited, the fresh air, moderate exercise, gentle stimulation of the circulation and mental diversion having an excellent influence.

"So in properly selected cases of respiratory trouble the patients thrive under it, owing to improved oxygenation and nutrition.

"To sum up the matter, it would appear that under certain conditions and in certain cases the motorist may expose himself to positive risks. These risks may sometimes be modified or even removed by the use of proper precaution in the selection of a machine and by the exercise of wisdom in using it. Properly used in suitable cases, the automobile may be a valuable therapeutic agent.

Knowledge Is Needed.

"These things being true, it is time that knowledge upon the subject had been obtained sufficient to enable us to warn the public of the possibilities of danger and to instruct it as to the best means of protection.

"In addition to those precautions of a personal nature which each one using the automobile should observe, the safety and comfort of all would be greatly enhanced:

"1. By good country roads, kept in good order.

"2. By well-paved city streets, kept free from dirt and from the fine dust which is now allowed to remain after the coarser matters have been removed.

"3. By the enforcement of the laws against automobile smoke in our cities as the same laws are enforced in the principal cities of Europe.

"Thus would much just criticism of the motor be silenced, and many friends be gained to a worthy cause.

"All things considered, the final verdict seems decidedly in its favor. The authority of life insurance thus far has not been able to discriminate against it, high medical authority commends it in kindred directions and common sense, together with experience, seem to sustain it."

THE ANTITOXIN TREATMENT OF DIPHTHERIA.

Again are we nearing the season when the problem of diphtheria and its treatment must be met and solved. The writer of this paragraph is forcibly reminded of the fact by the receipt of a modest but important brochure of sixteen pages bearing the title "Antidiphtheric Serum and Antidiphtheric Globulins." A second thought is that here is a little work that every general practitioner ought to send for and read. Not that the booklet is in any sense an argument for serum therapy. It is nothing of the kind. Indeed, the efficacy of the anti-toxin treatment of diphtheria is no longer a debatable question, that method of procedure having long since attained the position of an established therapeutic measure. The pamphlet is noteworthy, because of the timeliness of its appearance, the mass of useful information which it presents in comparatively limited compass and the

interest and freshness with which its author has been able to invest a subject that has been much written about in the past dozen or fifteen years. Its tendency, one may as well admit, is to foster a preference for a particular brand of serum, but that fact lessens not one whit its value and authoritativeness.

Here is a specimen paragraph, reprinted in this space not so much to show the scope and character of the offering as to emphasize its helpful tone and to point out the fact that its author was not actuated wholly by motives of commercialism:

"Medical practitioners have learned that, inasmuch as the main problem presented in the treatment of a case of diphtheria is the neutralization of a specific toxin, the true antitoxin cannot too soon be administered; moreover, that, antitoxin being a product of definite strength, a little too little of it may fail when a little more would have succeeded —hence larger or more frequently repeated doses are becoming more and more the rule. One more point: If the medical attendant is prompt, as he must be, and fearless, as he has a right to be, the full justification of his course will hinge upon the choice of the best and most reliable antidiphtheric serum to be had; for while there is little or no danger of harm ensuing from the use of any brand issued by a reputable house, the best results—which may mean recovery as the alternative of death—can only be hoped for from the use of the best serum."

The brochure is from the press of Parke, Davis & Co., who will doubtless be pleased to send a copy to any physician upon receipt of a request addressed to them at their main offices, Detroit, Mich.

Swift Lithia Spring Water

PRESCRIBED AND RECOMMENDED BY PHYSICIANS

ANALYSIS OF
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As made from a sample personally taken from the spring by Dr. H. C. White, Prof. of Chem., University of Georgia.

Calcium Sulphate	90.233
Magnesium Bicarbonate	3.105
Sodium Sulphate	0.605
Sodium Chloride	1.121
Sodium Bicarbonate	1.855
Potassium Sulphate	0.315
Lithium Bicarbonate	1.845
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Silica	2.115

The water is clear and colorless, without odor, and faintly acid in reaction. Specific Gravity (60f) 1.00138.

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"The water contains absolutely no gas-producing or pathogenic bacteria. It is extremely pure. This is a very pure genuine lithia water of moderate strength."

For All Diseases Arising From

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The following is a list of the members of the S. C. M. A., reported to the State Secretary's office up to April 5, 1910. If your name is not on it, and you are a member, consult your County Secretary.

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"pain, due to pressure upon nerve endings by swollen and infiltrated tissues, as manifested in inflammation, is promptly relieved by the application of moist heat.

Whether the inflammation be deep or superficial, moist heat, best exhibited in the form of antiphlogistine, relaxes tension, stimulates capillary and arterial circulation, encourages absorption of exudates, thus removing pressure and the always accompanying pain.

The therapeutic value of moist heat in conditions manifested by inflammation is conceded. The many superior advantages of applying moist heat in the form of antiphlogistine (the original clay dressing) is proven by the confidence accorded it by the medical profession and its ever increasing sales."

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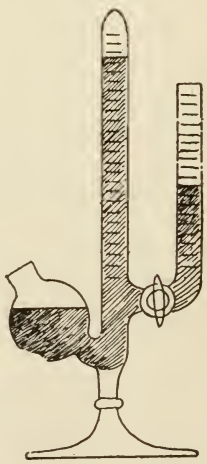
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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. J. C. SOSNOWSKI, Editor.

VOL. VI. OCTOBER, 1910. No. 10

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

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JOURNAL S. C., MED. ASS'N., CHARLESTON, S. C.

THE OWEN BILL FOR THE ESTABLISHMENT OF A FEDERAL DEPARTMENT OF HEALTH, AND ITS OPPONENTS.

By S. Adolphus Knopf, M. D.,

Professor of Phthisio-therapy at the Post-Graduate Medical School and Hospital, New York.

Anyone who is familiar with the workings of governmental departments of health, such as exist abroad, who has seen or experienced the sanitary benefits bestowed upon the people by the Reichs-Gesundheitsamt of Germany (Imperial Department of Health), the Conseil Superieur de Sante Publique de France, and the similar institutions of most European governments, cannot help feeling amazed that any opposition should exist to the establishment of a federal department of health in this country. The amazement becomes all the greater when one considers some of the elements of which the opposition to that measure is composed. There is, for example, the New York Herald, a large and influential newspaper with an honorable career and a brilliant record for advocating everything that is conducive to the public welfare. Only in this particular instance has it allowed itself to become the mouthpiece of principles to which it is in general opposed, that is to say, principles and measures whereby the good of the people at large and the progress and welfare of mankind are hindered, and the lives of individual American citizens endangered. This particular newspaper is independent of any political party, or professional or religious association which might preju-

dice its point of view, and still it opposes a measure, whereby all citizens of the country would benefit. The writer cannot help thinking that this powerful news organ has not informed itself thoroughly of the real purpose and function of a federal department of health, and in its attack upon a large body of men such as compose the American Medical Association, the American Public Health Association, the National Association for the Study and Prevention of Tuberculosis, the American Association for the Advancement of Science, and the various medical academies of the country, it is certainly misguided. It is to be hoped that the distinguished editors of the New York Herald will soon see that in their attitude toward the Owen Bill they are not on the side of the people, but are working against the welfare and interests of the masses.

The principle of the Owen Bill, establishing a department of health, has been endorsed by the President of the United States, by General George M. Sternberg, surgeon-general of the army (retired), and Rear-Admiral Charles F. Stokes, surgeon-general of the navy; by General Walter Wyman of the public health and marine hospital service, by Dr. Harvey W. Wiley of the bureau of chemistry, by governors of States, by the Conference of State and Territorial Boards of Health, by the United Mine Workers of America, by the National Grange, by the republican and democratic platforms, and by numerous other organizations.

What is the principle of this bill which is advocated by thousands of men trained in medicine or sanitary science and interested in the public welfare?

Section 7, which embodies the main purpose of the Owen Bill, reads as follows: "That it shall be the duty and province of such a Department of Public Health to supervise all matters within the control of the Federal Government relating to public health and to diseases of animal life."

Section 2 of this bill deals with the unification, under a Secretary of Public Health, of the various agencies now existing which affect the medical, surgical, biological or sanitary service.

There has recently been formed an organization which calls itself "The National League for Medical Freedom." It has for its purpose to combat the Owen Bill; it is opposed to the establishment of a federal department or bureau of health. The name of this organization is certainly, if not intentionally, misleading. It cannot claim to battle for medical freedom, for there is not a word in the entire bill which could be interpreted as limiting the practice of medicine to any particular school. Their claim that the establishment of such a bureau of health would have any resemblance to a medical trust is entirely unfounded.

The life insurance and industrial insurance companies, which advocate this bill, certainly have no desire to limit medical freedom or to repress any system which offers the chance of lengthening human life. These companies do not favor medical partizanship, and their sole interest is to prolong the lives of their policy-holders by whatever means possible. Their actuaries state specifically that they believe human life could and would be lengthened by the establishment of a Federal Department of Health.

Lee K. Frankel, Ph. D., representing the Metropolitan Life Insurance Co., is a member of the Committee of One Hundred, appointed by the American Association for the Advancement of Science, to further the propaganda for the establishment of such a department. Neither the above mentioned great newspaper nor any of the leading spirits of the "National League for Medical Freedom," all of whom, I regret to say, have allowed themselves to ascribe the worst motives to the members of the committee, will deny that the names of the officers of this committee show that it is thoroughly representative of the highest type of American citizenship. The offi-

cers of the Committee of One Hundred are:

President—Irving Fisher, Ph. D., Professor of Political Economy at Yale University.

Secretary—Edward T. Devine, Ph. D., LL. D., Professor of Social Economy, Columbia University, and Secretary of the New York Charity Organization Society.

Vice-Presidents are—

Rev. Lyman Abbott, D. D., LL. D., Emeritus Pastor of Plymouth Church, Editor of The Outlook.

Jane Addams, A. M., LL. D., founder and headworker of the Hull House Settlement; ex-president of the National Conference of Charities and Correction.

Felix Adler, Ph. D., Professor of Political and Social Ethics, Columbia University; leader of the N. Y. Society for Ethical Culture.

James B. Angell, A. M., LL. D., Professor of Modern Languages and Literature, and President Emeritus of the University of Michigan.

Joseph H. Choate, LL. D., D. C. L. (Oxford), Diplomat and United States Senator.

Charles W. Eliot, A. M., LL. D., President Emeritus of the University of Harvard.

Rt. Rev. John Ireland, LL. D., Archbishop of St. Paul.

Ben B. Lindsey, Judge, Reformer and Author, Denver, Colo.

John Mitchell, President of the Labor Union of America.

Wm. H. Welch, M. D., LL. D., Professor of Pathological Anatomy, Johns Hopkins University.

Need I say anything in defense of the Committee of One Hundred, after having given the names of its officers?

Direct and most unkind comments, not to use a stronger term, have been directed especially against one vice-president of the committee representing the medical profession. I refer to Dr. Wm. H. Welch, M. D., LL. D., President of the American Medical Association. Those who know Dr. Welch and even those who only know of him, would justly think it absurd if I should see the need to say even a word in defense of this master of medical science. To us it is indeed difficult to understand that there could be any man or woman in this land capable of speaking ill of Dr. Welch. There is no name in the medical world which is more honored in this country and abroad, no medical teacher more admired, no one who has a larger following that this Johns Hopkins professor of pathology, and no physician more beloved and looked up to as representing all that is best and noblest in the profession than Dr. Welch. If there is any man in the American medical profession who is unselfishly devoting his high intelligence, his time, and his means to the public welfare, it is Dr. Welch. Gladly do we acknowledge him as our leader.

To accuse the president and members of the American Medical Association of selfish motives in advocating the establishment of a federal department of health is absurd. If there ever was an unselfish movement inaugurated, it is this one. It is a movement by physicians for the reduction of disease, which *ipso facto* means a movement against their financial interests.

The writer is a member of the regular profession; he nevertheless would not wish for a moment to limit the freedom of any citizen to choose his physician from some other school or cult, providing the individual assuming the function and responsibilities of a physician had the training necessary to prevent him from endangering the life of his patient by lack of medical knowledge or skill.

The official mouthpiece of this "National League for Medical Freedom," is Mr. B. O. Flower, who had heretofore the reputation of a fighter for everything involving the spiritual, social, and physical progress of humanity, and it is inexplicable to many of his admirers how he

can lead a movement opposed to the improvement of the health of the nation. The vast majority in the ranks of this so-called "League," though they may be well meaning, noble, and earnest, are not men and women who have toiled patiently for years in order to acquire the thorough scientific medical training which enables one to assume that great responsibility of the care and treatment of the sick. They are unable to appreciate the inestimable value of federal help in preventing disease. These people are blindly following certain individuals who designate the regular profession as a medical trust, and accuse the thousands of noble men and women who are devoting their lives to the alleviation of human ills, of a desire to monopolize medical practice. The establishment of a federal department of health would mean pure food, pure medicine, control of plagues and epidemics, the advancement of medical science and through it the improvement of the health and increase of material wealth of the nation. It is said that many of the individuals opposing the Owen Bill are commercially interested in the manufacture of drugs or patent medicines, of which latter the American people swallow about $200,000,000 worth annually. Whether it is true or not that the "National League for Medical Freedom" is backed financially by drug manufacturers and patent medicine concerns, I am not prepared to say; yet, even these men have nothing to fear from a federal department of health, if the drugs they put on the market are pure and the claims made for patent medicines do not delude the public or endanger its health. The element which clamors most loudly for medical freedom is composed in many instances of men and women who have attended one or two courses of lectures or got their "degrees" without any training at all, and have developed into "doctors" and "healers" in a most remarkably short space of time.

Because the American Medical Association has always advocated a thorough medical education, is pleading constantly for pure drugs, is opposed to quackery, patent medicines and nostrums, its 40,000 members are considered a medical trust. Yet it is in the ranks of this very American Medical Association that are found the greatest number of unselfish devotees to preventive and curative medicine. It is among this association that are found the men who have added the greatest glory to the medical and scientific reputation of this country. America's greatest surgeons—Marion Simms, Gross, Sayer, O'Dwyer, Bull—were members of this association. McBurney, Jacobi, Stephen Smith, Welch, Osler and Trudeau have graced this association by their membership for nearly half a century. The heroes in the combat against yellow fever—Reed, Lazare—and the hundreds of others who have devoted their best energies and knowledge and often sacrificed their lives for the sake of medical science, were members of the American Medical Association.

One of the most illustrious members of the American Medical Association is its former president, Col. William C. Gorgas of the U. S. Army, Chief Sanitary Officer at Panama, an adherent to the regular school. It is, thanks to the genius, the scientific and thorough medical training of Dr. Gorgas, that the formerly deadly Isthmus of Panama has now become as sanitary a region as any. A great patriotic enterprise, important to commerce and the welfare of nations, was made possible by this man. He has labored and is constantly laboring for the establishment of a federal department of health, because he knows the inestimable benefit which such a department would bestow upon the nation.

Whatever advance has been made in medical science in America or in Europe, has been made by scientifically trained men or by physicians not without but within the ranks of the regular profession. The greatest benefactors of mankind are those who diminish disease by prevention and cure. As another illus-

trious example of medical benefactors, may I be permitted to cite that great trinity of scientific giants, who through their labors have accomplished so much in reducing disease and lessening human misery in all parts of the globe? They are Pasteur of France, Lister of England and Koch of Germany; all of them aided their governments by direct participation in the governmental health departments. We are still mourning the death of perhaps the greatest of the three—Robert Koch. I do not believe that there is, even in the camp of our opponents in this so wrongly called "League for Medical Freedom," a single intelligent individual who will deny the inestimable benefits which Koch has bestowed upon mankind through his discovery of the germs of tuberculosis, of cholera, of the spores of anthrax, of tuberculin, and through his many other equally important scientific labors. Yet, had it not been for the Imperial German Reichs-Gesundheitsamt, which is the equivalent of the institution we are striving for—a federal department of health—Koch never would have been able to devote his life, energy, and great genius to those important discoveries through which thousands of lives have been saved in all civilized countries during the past few decades. It was while working in this governmental institution, which is doing exactly the work the Owen Bill asks the Federal Department to do, that Koch discovered the tubercle bacillus and the bacillus of cholera. Because of the discovery of the comma bacillus, we no longer have those tearful cholera epidemics which formerly decimated our own and other countries. This disease can now be easily diagnosed and by proper quarantine its mortality can be reduced to a minimum. And what shall we say of the progress that has been made in the fight against tuberculosis, because the Federal Department of Health of Germany enabled Koch to do research work and thus discover the bacillus of tuberculosis to be the primary and only direct cause of the disease? As director of the Hygienic Institute and member of the Reichs-Gesundheitsamt he inaugurated that wonderfully effective campaign against tuberculosis, whereby the mortality from this disease in Germany has been reduced to nearly one-half to what it was prior to the discovery of the tubercle bacillus.

Under Koch's inspiration and guidance, and in the same institute, many great scientific discoveries of incalculable value to humanity were made. Foremost among them are the works of Ehrlich, one of Koch's most celebrated pupils, who recently gave to the world a new remedy which promises to prove a specific in an affliction from which mankind has suffered for centuries.

As co-worker in the Kaiserlich Gesundheitsamt and the Institute for Infectious Disease, affiliated therewith, we must also mention Behring, the discoverer of the anti-diphtheritic serum. Thanks to the discovery of this serum, thousands of young lives are now saved, which would formerly have fallen victims to the terrible disease known as malignant diphtheria. This was made possible by the opportunity given to the workers in the Reichs-Gesundheitsamt and Imperial Institute for Infectious Diseases.

Can there be any better argument in favor of the establishment of a Federal Department of Health?

THE USES OF "CARBONIC ACID SNOW" IN SURGERY, WITH DEMONSTRATION OF ITS PREPARATION.*

By S. C. Baker, M. D., Sumter, S. C.

Cold as a local anesthetic has been employed for many years. The use of ice and salt applied to or rubbed over the surface to be anesthetized is familiar to all, and more recently a spray of ether or ethyl chloride has been used advantageously in small operations, such as the extraction of an ingrowing nail or the opening of a boil. These agents do not produce any very profound influence upon the tissues however, as the cold does not strike in very deeply, and the part treated soon returns to the normal in every respect. Where a greater degree of cold is attained and the tissue thoroughly frozen, a permanent effect is had, particularly upon the blood supply to the part. The ultimate result is the obliteration of the superficial capillaries in the frozen area and, if pushed still farther, a sloughing out of the frozen tissue. These facts have been utilized in the treatment of such troubles as naevi of the face or other parts, skin discolorations caused by dilated blood vessels, as in acne rosacea, etc., and in the removal of small moles, warts, epitheliomata, etc.

In an account of a visit to the Mayo Clinic, in Rochester, Minn., prepared for the Fourth District Medical Association, something over a year ago, I described the preparation of carbonic acid snow, which when dampened with sufficient sulphuric ether to be of the consistency of slush ice is claimed to register a temperature of minus 280 degrees (F.), and is used in that clinic for the treatment of the class of cases just mentioned. The mixture is spread over the part with a wooden spatula, as the wood conducts heat poorly.

The directions then given were, "get a tube of carbonic acid gas (20 pounds is large enough), such as is used at every soda fountain. Loose the stop-cock and allow a stream of the gas to escape into a thick woolen stocking or into a sleeve from an old flannel undervest. The rapid escape of the gas, which makes its way through the pores of the cloth freezes the gas which is yet in the stocking into a white mass of carbon dioxide ('carbonic acid snow'). Empty this out into a glass and pour on enough ether to make slush ice. Apply to the naevus for thirty seconds and it freezes and obliterates the dilated blood vessels." Since the appearance of these directions, as printed in the Journal, I have received a number of requests from members of the Association for further particulars as to the method of preparing, since the writers had failed to get it by following the directions quoted. I wish to add, therefore, that in placing the tube it must be laid on its side with the bottom or solid end elevated about six or eight inches above the end in which the stop cock is situated, in order to obtain the best results. This position of the tube seems to facilitate the rapid outflow of the gas, which is heavier than air, and results in the formation of the snow. When formed, it can be conveniently turned out upon a sheet of paper and slid into a tumbler or cup.

It will quickly blister the fingers if you attempt to manipulate it with unprotected hands. Pour in a little ether and stir up with a wooden spatula, which is more comfortable to the hands because it does not conduct heat. In using upon the face do not apply too long (about thirty seconds), as it will be followed by blister of the part and leave a painful wound. I have here a tube of gas and a stocking, and will show you the process.—*Demonstration.*

*Read before the South Carolina Medical Association, Laurens, S. C., April 19-21, 1910.

THE HOOKWORM DISEASE AS IT PERTAINS TO THE EYE AND EAR SPECIALTY,*

By Leland O. Mauldin, M. D., Greenville, S. C.

Mr. Chairman and Gentlemen of the South Carolina Medical Association:

There has been a great deal said here of late about the hookworm in its various economic relations, and of its interrelation with disease in the various organs of the body, particularly of the blood and the abdominal organs; but comparatively little has been said about its direct or indirect specific effect upon the eyes and ears—hence my reason for presenting this article to-day.

I trust that my limited observation in this particular, on account of having only a limited number of patients with hookworm disease, will show you that I have only a nucleus of facts around which to build the material structure of this portion on the symposium on hookworm diseases.

But, if this will in any way arouse a single member of this organization to a truer conception of the symptomatology and pathology of the disease and stimulate him in his efforts to make a more rigid investigation into the minutiae of the pathological conclusions, my work shall be considered as not having been spent in vain.

It is a scientific fact that many disturbances of the eye and ear act reflexly to produce perverted conditions in organs of the body remote from the seat of trouble.

Reasoning conversely, we should not allow this great fact to overshadow the important truth that the organs of special senses can themselves be reflexly acted upon by disturbances of the general system.

Of course the pathology produced by that troublesome little parasite, the hookworm, is yet in its incipiency of development, and when in the process of time its ultimate destructive metabolism shall have been sifted and finally determined, it will be found responsible for numerous cases of phlyctenular conjunctivitis and corneal ulcers, herpetic eruptions and anaemic disturbances, producing noises in the head.

The distinctive reasons for these lesions, I ascribe to malnutrition and impoverished blood. Surely the hookworm causes these things, and surely these are sufficient in degree and extent of invasion to produce such pathology or allow it to take place.

Another important fact worthy of mention is, that with the hookworm disease the organs of special senses are stupefied and do not readily respond to external impressions. This stupefaction seems to be coincident in its development with the mental inalertness which always attends the disease.

In my limited experience a few cases of unquestionable hookworm disease have afforded me the privilege of examining the fundus of the eye with the ophthalmoscope, and I found in most of them a pallor of the optic disc which was decidedly abnormal and in such the acuity of vision never approximated (20/20) normal, but was about 20/30, and usually one eye was a little less in acuity than the other.

In one case of anaemia and malnutrition, associated with the hookworm disease, there was an irido-clyclitis approximating an interstitial keritits, which improved remarkably under the thymol treatment and local administration of

*Read by title before the South Carolina Medical Association at Laurens, S. C., on April 19, (Charleston News and Courier, Sept. 21, 1910.)

atropine sulphate solution by instillation into the eyes.

The remarkable feature about this case was that there was an absence of specific history, and that it improved rapidly under the local treatment and the thymol administration, and that neither mercury nor the iodides were administered.

As yet I have not had the opportunity to diagnose a case of tinnitus aurium as being due to the anaemia produced by the hookworm, but am expecting to land upon this fact any time in the future that my experience with the disease may give the opportunity; for it is certainly reasonable to believe that there are cases of noises in the ears, due to this disease and this disease alone.

I am also expecting to find floating particles in the vitreous of the eye, due to exudation of blood from the weakened retinal blood vessels brought on by anaemia due to hookworm disease.

THE UNSPEAKABLE HOOKWORM.*

By F. Julian Carroll, M. D., Summerville, S. C.

Of late, both the medical and lay journals, but more particularly the latter, have been so full of allusions to the unspeakable hookworm and the dread pellagra, that the old-time fashionable diseases, such as appendicitis, have practically been filibustered out of business.

True it is that the abdominal surgeons still continue to do business at the old stands, and the pestiferous appendix is not yet safe to its possessor, even though he adopts the Hebrew expedient of "putting it in his wife's name."

The modern surgeon respects neither sex, age nor previous condition of servitude, and even now he is doubtless planning some surgical method of capturing the hook worm in his favorite haunts.

However, I seek not to cast aspersions on these highly paid wielders of the scalpel and the haemostatic. On the contrary, may they live long and prosper, and may they ever treat the vermiform appendix as an unwelcome intruder, with a certain well established price on his head.

I do, however, arise to protest against the very prevalent notion which seeks to picture the inhabitants of the South as spending their time, alternating between swinging onto an "ague post" in their efforts to keep the chills from shaking their jaw teeth loose; and sitting in the sun, seeking to warm and nourish a very prosperous and insatiate colony of hookworms.

At odd times, we are currently supposed to act as incubators for aspiring cases of pellagra.

If, as has been claimed by a pseudo-hookworm expert, ninety per cent. of the inhabitants of certain sections of the South are the victims of this disease, which, by the way, this same "Authority" always alludes to as "Uncinariasis," with an accent on the—but never mind the accent! It would seem absurd to claim that it is such a serious malady.

Repeated examinations of the students of Southern colleges have revealed the fact that a considerable proportion of the most robust and athletic of them are the somewhat unwilling and altogether unconscious hosts of the ankylostoma duodenalis, or to call him or her by the shorter and uglier term, hookworm.

An experiment which I personally conducted some seven or eight years ago,

*Prepared to be read at the Laurens meeting of the South Carolina Medical Association.

among a class of people known as Crackers, showed an infection of every case examined. I promptly thymolized the surrounding country, and though the benefit was for a time apparent, I am not at all sure that it was not largely due to the tonic treatment which was given after the vermifuge had been administered; and once the treatment stopped, so likewise did the improvement.

From these cited facts it seems only fair to deduce that the hookworm, in a healthy person, who is well fed and nourished, does not produce serious illness, nor often, symptoms of any kind; and the line of symptoms usually laid at the door of this parasite, are not all, or even largely attributed to this cause, as is clearly shown by the lack of symptoms in the college students examined.

I do believe that, when in addition to the various ills of poverty, impure or insufficient food, unhygienic modes of living, and malarial cachexia (which though an obsolete term is a concrete fact), we engraft a hookworm infection; we have furnished the straw which is calculated to break the camel's back; but we must not infer from this that the straw is the whole load. We should not attribute to the hookworm the causation of a whole string of evils of which it is really only the culmination.

To relate a case which, I think, illustrates this point:

I was called to see a man suffering from pronounced dyspnoea, cardiac palpitation, marked anaemia, and excessive ascites, besides considerable general dropsy. The amount of fluid in the abdomen was so excessive that I had to draw away several gallons to render him fairly comfortable.

He had been treated by many doctors for many ills, including heart disease, kidney disease, liver trouble, and what not, without any degree of success. Having hookworm on my mind figuratively, though I hope not actually, I ordered a large dose of thymol to be given in the usual manner, and repeated at the end of a week. Besides he received appropriate tonics and treatment, directed especially towards the reduction of the dropsy. A few weeks later my patient to all appearances was a perfectly well man, seemingly a brilliant exemplification of the benefit of the thymol treatment. But there is another chapter to this thrilling story, and unlike the "HOME AND FIRESIDE," and similar entertaining and instructive publications, I will not keep you in trembling suspense "until our next," to finish my tale.

I saw him again in the Spring, my first visit having been paid in the Winter, when malarious diseases are in abeyance. He was in extremis, and died a few hours later of hemorrhagic fever.

This man lived in an intensely unhealthy region, where malarial fever was accepted as a part of the every day's business, and the common method of shaking out the bed clothes was to lie in bed at chill times. Now, while undoubtedly the exhibition of thymol in this case, and the consequent expulsion of a large quantity of hookworms, pulled him out of a very deep hole, he afterward died from a most virulent malarial infection, and undeniably his system was poisoned with this disease, both previous to and after the treatment for hookworm. And this, in my opinion, was largely responsible for the severity of the symptoms, attributed by me, at first entirely to the hookworm infection.

If, as is commonly asserted, the hook worm, and not climatic conditions, is the cause of the alleged laziness of Southerners, why is it that the large number of young men of the South, who annually go to New York and other Northern cities give no evidence of this affection? I think that it has never been asserted that change of climate rids one of these voracious destroyers of energy.

Did Rector, of the University of Virginia, show any sluggishness in the Olympian games? Were the famous family of Greenways ever accused of being lacking in either nerve or energy? Rudolph

Seigling, the captain of last year's eleven at Princeton, was about as husky a two hundred and twenty pound tackle as they generally turn out. And these are by no means isolated cases.

For the size of the colleges and the amount of material at their disposal, and considering their lack of money and consequent absence of skillful training, the foot ball and athletic teams, generally, of our Southern colleges compare most favorably with the big teams of the North. And, bear in mind, please, that a team of Southern athletes is probably feeding a large and variegated assortment of hookworms.

And yet the pitiful cry has gone forth and "a certain rich man," out of his abundance, has given us one of the oleagenous crumbs that fall from his table, in the shape of a million bits of gold. Possibly he has cornered the thymol market. We only throw this out as a suggestion, however, and do not assert it as a fact.

Now, if this million is wisely used in improving the condition of the class of people for whom it was intended, and not spent in making the whole population of the South receptacles for excessive amounts of thymol, much good can be done. Otherwise it will prove a mere temporary expedient.

To recapitulate: As long as we have dirt and poverty, with the accompanying squalor and lack of proper hygiene and food, we can do little of a permanent nature for the relief of the class of people among whom the hookworm plays the greatest havoc.

By all means clean out these parasites, but don't impress on your patients that they are the only source of evil against which they have to contend. And above all things, let up on this organized system of advertising to the world that this southern portion of the United States, is chiefly noted for its production of hookworms, malaria and pellagra.

If your object is to alarm the laity, you have succeeded admirably, and though their ideas are a little vague, many estimating this animal to vary in size anywhere from the dimensions of a boa-constrictor to a rattlesnake, they are fully aware of the terrors of the situation. A little reactionary tendency is beginning to become evident, and inevitably it will grow.

A good thing can be pushed too hard.

THE VALUE OF FREE NASAL BREATHING.*

By Theo. A. Quattlebaum, M. D., Columbia, S. C.

In looking about for a subject for discussion, the aim has been to select one of practical importance to you as practitioners of general medicine—a topic whose importance, if appreciated, will be of real value and service. If I cannot succeed in making my subject interesting, its brevity, I trust, shall save it from being tedious.

It is not necessary to go into the anatomy of the naso-pharynx, of which all of you have at least a general knowledge. There are probably very few noses that are perfectly normal, tho' there are great numbers so nearly perfect, functionally at least, that no treatment is demanded or required. We shall get a better conception of the value of free nasal breathing in an indirect way, by presenting the results following its loss. A mere enumeration of the causes, in part, of nasal and naso-pharyngeal obstruction will be sufficient for our purpose.

Among the many causes may be mentioned, deviated septa, spurs, polyps, cystic turbinates, the various kinds of rhinitis, tumors, adenoids, narrow nares, etc.

*Read before the Lexington County Medical Society, July 4, 1910.

The function of the nasal cavities is three-fold—respiratory, olfactory and that of phonation. The respiratory function is exceedingly important, and its impairment or total loss is a serious matter. The nasal cavities are so constructed that the air during its passage through them is warmed, moistened and filtered. This is necessary for the protection of the larynx and the delicate bronchial membrane, and for fitting the air for aeration. By reason of this work of the nasal cavities, cold, dry air, laden with dust and bacteria, enters the lungs at blood heat or nearly so, and almost free from dust, and more or less sterile. Thousands of dust particles and many bacteria slipping through the picket line of short, stiff hairs at the entrance, are deposited upon the nasal membrane, whence they are wafted and washed outward by the wave-motioned ciliated epithelium and nasal secretion. One can imagine the effect of the constant passage of improperly heated and moistened air, passing through the mouth into the lungs, by reason of impossible nasal breathing, together with whatever of foul matter the buccal cavity may have to contribute.

If, in addition to all this, we think of the quantity of dust and pulverized fecal matter, and all the floatsam and jetsam that compose the dust clouds of our city streets and country highways, that is taken into the mouth of the mouth-breather and swallowed, we wonder how any are left to tell the tale.

While the olfactory function is very important, its loss is not so constantly pregnant of evil as is that of the respiratory. The sense of smell affords pleasure, unhappiness and protection to life. When the aroma of the sweet-smelling flower stimulates the fibrils of the olfactory nerve, we are grateful for the possession of the olfactory sense, but when in the presence of a performing pole-cat we would not lament its temporary absence. While we do not get our living by our sense of smell, as do the wild beasts of the jungle, in whole or in part, nor do we scent our enemies from afar as they do; yet, the nose, able to smell, has often detected the open gas jet and the noxious vapors, and the smell of smoke that told of a consuming fire that would, without the telling, have destroyed house and its sleeping inmates.

One warm summer night, several young women were in a room preparing to retire for the night, when one of them said, "I smell a negro," and rushing quickly to a window she threw open the blinds and knocked from the top of a barrel, a negro, who was not there for the purpose of guarding the innocent. The possession of the sense of smell may mean life; its loss may mean death or worse.

The sense of smell has an effect upon appetite and digestion—the pleasant odor of a good dinner stimulating the appetite and increasing the salivary secretion—the "mouth waters," as we say.

The nasal cavity is a resonating one and modifies the sounds produced by the vocal chords. This sound production is called phonation. We do not fully appreciate this property of the naso-pharynx until we lose it. We say of some one that he has a nasal twang or that he talks through his nose. As a matter of fact his peculiar voice is due to the fact that he does not talk through his nose, because it is obstructed by some one or more of the causes which produces that condition. It is utterly impossible for the lover with a nasal obstruction to speak to his sweetheart in the soft, dulcet tones of the hero of the novel.

The results of nasal or naso-pharyngeal obstruction are in three words—imperfect aeration, indigestion and facial deformity; in two words—insufficient cell nutrition and facial deformity. One of the constant results of nasal obstruction, is a decrease in the number of red corpuscles which are the carriers of oxygen which is essential to life. In a series of cases of nasal obstruction, in which Kyle

made a blood examination, he found that in all cases the number of red corpuscles was reduced to 3,000,000 per c. c., (5,000,000 is the normal number), and in some instances to one and one-half million, while the hemoglobin was reduced to sixty or even fifty per cent. of the normal quantity. And in many of the cases there was a slight increase of the white corpuscles, this last circumstance indicating a toxemia. These findings would not be conclusive if he had stopped here, as some other cause or causes might have been responsible for these changes. But a blood examination, subsequent to the removal of the obstructions, showed the return of the blood elements to the normal standard. When we remember that oxygen is essential to the carrying on of the metabolic process which sustain life and remember that this oxygen is distributed all over the body by the hemoglobin, carried thither and yon by the red corpuscles, we begin to appreciate the significance of the findings of Kyle.

The second result of nasal obstruction is indigestion, which is of practical moment to the general practitioner. In all cases there is a change, either in quantity or quality, or in both, of the nasal secretion. The constant swallowing of this secretion, abnormal in amount or quality, by modifying the digestive fluids, brings on indigestion, with all its train of symptoms— fulness after eating, malaise, discomfort, constipation and auto-intoxication. In the so-called catarrhal conditions indigestion is practically always present. As a bit of useful advice, never try to cure a case of chronic indigestion, without having the teeth put into proper condition for masticating the food and directing your efforts toward relieving the catarrhal state. It will not infrequently happen, that the indigestion will disappear when these matters are corrected. It is true that in the one case, the dentist will get most of the praise and perhaps most of the money, but you will have the consciousness of having done a good deed for your patient. And besides, not all will fail to remember the wise and honest doctor who set them on the right road to health.

The last result of naso-pharyngeal obstruction which I shall mention is facial deformity. This condition is nearly always due to hypertrophy of Luska's gland, which is a physiological structure until overgrown. When abnormally large it is known as adenoids. The subject adenoids has been much written and talked about of recent years, and is consequently somewhat hackneyed. Yet, it is quite evident that its importance is either not appreciated by the general run of practitioners or else is not generally diagnosed. I shall not go into the subject, save in so far as it has to do with deformities of the maxillary bones.

The deformity is produced by certain muscles and the modus operandi is substantially as follows: The forceful inspiratory efforts, made by the muscles, to draw the air through an obstructed passage, causes repeated pressure against the superior maxilla. This results, after a time, in a tilting outward of the portion in which the teeth are placed and a depression backward of that portion at the base of the nose. The arch formed by the hard palate is tortured out of shape and this produces great irregularity of the teeth. You will at once understand that these changes must take place during childhood, before the bones become hard and permanently fixed. If the cause is not removed early, ere the deformity becomes permanent, the damage is done beyond repair, as a subsequent operation will only relieve the obstruction and will not correct the deformity. Hence an early diagnosis and proper treatment are of vast importance. Now, a word as to the diagnosis of adenoids and I am done.

There are a number of symptoms indicative of their presence. But as the proof of the pudding is in the eating thereof, so also the proof of the presence of adenoids is the finding thereof. To do this it is not necessary to use head-mirror or any instruments, though of

course they may be employed. Simply pass the left arm around the left side of the child's head and with the tips of the fingers of the same hand press the right cheek between the jaws to prevent biting or closing of the mouth. Then holding the head firmly pass the right index finger up behind the soft palate and feel for the usually soft mass of the posterior wall. The only treatment is removal of the growth. In closing I desire to thank the society for their kind invitation and to assure them of my pleasure at meeting old friends again.

EDITORIAL.

MENTAL MEDICINE.

In our last issue we touched lightly on the various catch-penny cults which are parasitic on medicine, and spoke of the responsibility resting on us for their growth. Here we desire more especially to consider mental therapy and the so-called mental healers.

The practice of suggestion is as old as our race. Even with the first man and the first woman, according to Biblical account, evil suggestion was introduced and the fall from grace brought about. All through the Bible we find accounts of wondrous cures wrought by suggestion. The Egyptian priests, who also filled the position of physicians, were adepts in the art. Moses, and later Christ, learned the art from them. The East Indians are today artists in suggestion. With their characteristic materialism the Western nations ignored this art until comparatively recent years; and yet accepted (and accounted for the results of their acceptation by stories of witchcraft, etc.), the most ridiculous suggestions. Belief in the efficacy of prayer, of the laying on of hands, of pilgrimages, of visits to the shrines of saints, of nails from the true cross, of fragments of bones supposedly of saints, of reading of books, of innumerable charms, amulets, etc., all are manifestations of the power of suggestion. And the interesting part of it all is that the very belief brings about what is believed in many cases. This is exemplified more clearly by Christian Science than by any other belief. Here a vast horde of people having been functionally deranged by their own or by others' suggestions have found relief by counter suggestions in the form of a religious cult. The sight is a pitiful comentary on human credulity—to see thousands of supposedly sane people suffering from real ills caused by imagination, flocking and paying to get relief from—imagination.

For these ills are real. There is no worse pain than that caused by imagination. Pain is psychic. Without the perception of pain there is none. An anaesthetic does not lesson the damage of the knife to the nerve endings, but deadens the nerve centers to the insult, and no pain is felt—hence there is no pain. On the other hand, imagination heightens the perception of pain and more pain is felt. So the higher psychic centers have their direct influence on the material portions of our bodies. This example of pain is chosen only because it is the most tangible of the many results of the unknown, so-called higher, self on the known or material self.

As to what this higher self is we do not know. Call it soul, call it psychic mind, call it subliminal self; call it what you will, the fact remains that we are ignorant of all but the fact that there exists a part of ourselves apparently detached from and yet attached to and an integral part of ourselves—a part which seems to be able to sit in judgment on our actions, to direct the palpable body

and brain. And what it is is still unplaced. Efforts have been made to weigh this part which leaves at death, and two or three years ago the lay papers were full of a tale, which came out of Boston, to the effect that certain physicians had actually weighed the departing portion at death, by placing a dying patient on finely adjusted scales and noting a sudden loss of two or three ounces of weight at the instant of death. Others have fatuously claimed to have photographed some emanescence exuding from the living body which changed with the mental condition of the individual. Others claim to have felt it, and other equally foolish claims have been made. Doubtless, some of these observers were honest in their convictions and actually accepted their own suggestion as to their perceptions; but equally truly these imaginings were vain —were but accepted auto suggestions.

One fact remains, however, the human body is susceptible to some unanalyzed power called the mental, and this mental part is capable of being influenced by suggestion. With further knowledge we will possibly be able to analyze the cause and effect of such influences and will then be able to plot out the mental processes with mathematical exactness. Until this further knowledge is obtained we must remain at a loss to account for various phenomena we now observe. When such knowledge is compassed we shall be able to direct the developing mind in such channels as we desire and to obtain relatively perfect mental machines, as we have done in the cases of electricity or of steam. Until that knowledge is obtained we shall still see mysteries and miracles.

But, in this connection we are in possession of many correlated facts which give us a working basis for practical application. We know that the physical, tangible part of ourselves is capable of being influenced and governed by the intangible part called the mind. We know that the "mind" part is capable of being influenced by external suggestion. We know these things, and yet ignore them as a rule, except indirectly. We see patients who are always brighter when the doctor is making his visit than when he has gone. We see others who are always sicker when they get any sympathy and still others who thrive on sympathy. We see some who are being kept in a chronic state of ill health by the suggestion of their well wishers, and others who, having no organic lesion, gradually get worse and worse through their own fear of some malign influence at work. And yet we scoff at suggestion—point the finger of scorn at those who prefer to use suggestion in their work. It is time that we realized the potency of mental influence in morbid conditions and applied mental therapeutics intelligently.

By this, we do not mean to encourage or even countenance the charlatanism rampant to-day. We do not advocate resort to the various farcical cults, as mental healers, Christian Scientists, faith curists, mesmerists, etc., etc. These we condemn absolutely, for they are practiced in ignorance and do incalculable harm. But we do stand for a closer study of the patient himself—of the *real* patient. We do advocate a close investigation of all cases, especially of functional derangements, and a more intelligent examination of the mental condition of the sufferer. And we advocate an intelligent use of suggestion in appropriate cases. It is a farce to keep pouring nox vomica or pepsin or taraxacum into a stomach which is functionally deranged by financial or family disordeers; to apply poultices for blows to one's hopes. It savors of charlatanism to collect fees for such useless services. There is many a patient who could obtain far more benefit from his physician through a little intelligent and sympathetic advice—even from the unburdening of his mind—than from the whole pharmacopeia. And likewise there is many a patient who is benefited by assurance and by reassurance—even by so-called hypnotism properly applied. But it is necessary that intelligence be used in the application of these measures.

Suggestion will not cure organic or microbic disease; it will not prevent infection; it will not usurp the place of surgery; it will not restore diseased tissues. It is not a panacea. But it will, when properly applied, prove of great aid in many conditions, and will save many a dose of medicine, many a pain, many a hypochondriac.

So far suggestion has been to the layman a source of fear and wonder, and to the physicians a plaything; but the time is arriving when applied psychology shall take its place among the definite therapeutic agents. Against that time let us perfect ourselves and study our patients —and ourselves—as psychic entities.

THE NEXT MEETING OF THE ASSOCIATION.

The next meeting of the State Association is to be held in Charleston on the 18th to 20th of April, 1911. It is hoped that the profession throughout the State will attend in full force and strive to make the meeting a success in every way. One way to help in this is to start in right now, and prepare for your paper next April. Commence collecting your data now—do not trust to a hurriedly culled and badly digested mass of facts from a few text books, but pick your subject, and for the next few months become a specialist in it. Gather all the facts possible on the subject and then boil them down.

Eliminate the useless and archaic and unfounded ideas, and put the rest into such form as will carry some good lesson to your hearers. Do original work and make your own observations. There is much material in South Carolina for original work, in fact even the most commonplace diseases offer opportunities for new observations. But do your own observing and your own thinking, and tell the rest of us about it next April.

There is much we do not know about cholera nostras, sprue, parasitic diseases, malaria, beri-beri, typhoid fever, drug rashes, skin diseases, and of all the various other afflictions. Papers on the various insects, especially the parasitic ones as the ticks, red bugs, etc., would be of interest. Observations on the various mosquitoes are neglected but valuable, accounts of the practice of the "Root Doctors," and the "cunger" men might be illuminating and certainly would be interesting.

Investigation of the various plants employed by the negroes and the Indians and the ignorant whites might be taken up. And accounts of the queer medical superstitions met with so often should certainly be tabulated. All these are thrown out merely as hints of the enormous wealth of matetrial for original observation which is going neglected in our midst. Much good work might be done in the next five months by investigation along these and dozens of other lines, and we hope *you* are going to do some. The time to get busy is *right now*.

Besides, it is always refreshing to our memories to hear some good rehash or compilation of the facts on any well-known subject—but it should have the merit of being a concise inclusive paper and not a jumble of other men's ideas. A medical paper has no reason for its being unless it presents either some new idea or observation, or else some old subject in an attractive and easily assimilated way. One of the best papers the writer has ever heard was, the author said, merely a rehash of the text books and journals on the subject. "Nothing new, nothing original," he said; and yet it was both interesting and instructive. So if you are going to present an old subject present it well; if a new one, give time and observation to it. And start in now.

ORAL HYGIENE.

In our last issue were two interesting articles on the medical inspection of schools, and in both a striking feature is the tremendous amount of defective teeth discovered where this work has been undertaken. In this issue an article appears illustrating how closely allied oral surg-

ery and dentistry must be. This close interrelation between dentistry and medicine is capable of even better development and should be encouraged.

As has been previously stated in the Journal, the field of preventive medicine is fast widening at the expense of the old field of curative medicine. The creed is now under adjudication that "It is better to prevent than to relieve." With this creed as ours we unhesitatingly endorse the plan of having dental inspection, and training in oral hygiene in our public schools along with other medical inspection.

Most of us, when brought to the question, are decided in our opinion that the care of the teeth is an important matter in the protection of the digestion. Most of us realize that bad teeth are the frequent cause of bad health, but most of us forget these facts when examining actual cases. For instance, the average physician when looking over a case of gastric neurasthenia, of fermentative dyspepsia or of chronic gastritis, will ask about habits of eating, of rest, of diet, of nerve strain, etc., but will neglect to examine the condition of the mouth, especially the teeth. A little pepsin or bismuth, or salol, or charcoal, or perhaps a stomach tube is prescribed, and the patient is told to "leave uneaten the things he used to eat, and eat the things he didn't use to eat" and he departs. Meanwhile his teeth suffer because his digestion is bad and his digestion in time suffers because his teeth are bad.

Bad teeth do a fourfold damage. First, they create pain, which through the reflex system causes a secretory neurosis, and also takes away the desire for food, as well as causing the food to be imperfectly masticated. Second, they cause, through their broken and damaged condition an imperfectly masticated bolus of food and at the same time, being a nidus of infection, fill the food mass with deleterious micro-organisms. Third, they are foci of infection for the various glands in their neighborhood, and are the laboratories for the generations of toxins. Fourth, they spread infection to the alveolar processes and cause caries of the jaws, with the general toxic train of symptoms which follow bone infection. Improper divisions of food, toxic absorption, bone infection—isn't that a serious lot of charges to make against any one organ? And yet these charges are true.

Now, knowing that these facts are so, it certainly seems worth while to us to prevent their incidence, especially as the prevention is simply a matter of cleanliness and care. We should lend our energies to the work of instructing both parents and children in the importance of care of these important but much neglected organs. If we were to take more interest in these matters we could do a world of good. It is to be regretted that our medical colleges do not pay more attention to the subject of dentistry, as then our graduates would be more alive to the importance of the work, and our patients would have less excuse for having digestion disorders.

The Journal hopes that, in the attempt to get medical inspection of the schools in this State, dental inspection and attention will not be neglected.

A FABLE.

Once there dwelt in a certain city a man known to his friends as a most learned physician. He delved into the hidden things of nature and acquired great learning. He spoke no ill of his fellow man nor no praise of himself, for he had obtained that knowledge which enabled him to see how vast was the knowledge he did not possess. He labored day and night to aid the stricken and the sick, and to add to his ability to aid them. And when he had worked some wonderful cure by his knowledge of nature he would say to those who would give him credit, "Nay, praise not me, I did but help by pointing the way, the pa-

tient did the rest. I am but the sign post on the road to show the way to health."

And many passed that sign post, read the direction thereon, and went their way without giving thanks for its aid or cash for its maintenance.

And time passed on and the sign post on the road to health grew more and more hoary and decrepit with age. The old physician was still going about doing his work and keeping his people on the road to health and was still forgotten when the time for paying of his bills arrived, for he seldom remembered to demand recompense for his work, but still gave credit to nature for her deeds.

In this same city there was a loud voiced, blatant holder of a paper on which was written "License to practice Physic and Surgery," but who had learned only enough while in college to pass his examination, and studied only enough after his departure with his diploma to be able to talk in a mystifying manner to the populace. When ill befell any one of his clientele he was always ready with an explanation placing the blame elsewhere than on himself—when one got well he thundered the news around and told all men how *he* had cured this or that one. Likewise he dressed in fine raiment, rode in high-priced cars and was much seen in public places—and much heard. For he was always ready to talk, provided he could talk of himself and of his wonderful ability and of his great achievements. And because he was always ready to agree with what his patients wanted to believe, and to cut into them at their desire, he was highly thought of by many and had a large following—likewise he got the coin. And he waxed fat and insolent and acquired great merit in his own eyes, and he was beloved of the undertakers.

It so came about that on one day these two men met at the bedside of a rich man who was seized of a pain in his belly. And the old man after much careful search, for he was cognizant of how he might err, declared the trouble to be but a common belly ache, and laid the blame on too much lobster salad the night before, and prescribed castor oil, when the rich man waxed wrothy. But the other physician after looking wise and asking no embarassing questions proceeded to punch his finger into that rich man's belly until he would wince and then delivered himself thusly:

"Your trouble, Mr. Richman, consists of an acute appendicitis, complicated by a cholecyst-cholangitis which has precipitated a Dietl's crisis, resulting in a profound depression of the splanchnic centers, and a pancreatico-duodenitis. Superimposed upon this is a motor and secretory paresis of the jejunum and an ileocolitis. I find it will be necessary to prepare immediately for an appendectomy, a cholecyst-enterostomy, a partial gastrectomy and a parancentesis of the pancreatic duct. The price for the appendectomy will be $800.00, for the cholecyst-enterostomy, $3,000.00, for the partial gastrectomy $5,000.00 and for the paracentesis of the pancreatic duct $7,000.00 and the operation must be done at once at my infirmary where you will pay $300.00 a week for a room and two nurses who will charge extra. And you had better write out your check at once for the full amount, but you need only make it $15,000.00, as the operations are very dangerous and I will throw in the appendectomy free of charge as it is you. And hurry up to the hospital before something dreadful happens."

Whereat the rich man hastened to the hospital, calling the doctor his savior and friend and villifying the old man who told him to take a dose of castor oil and quit eating so much. And he was operated upon and died with all of his operations finished.

Now, on coming out of the sick man's room the old man and the young man walked together and the old man asked why the other had spoken such nonsense to the sick man and asked what dreadful

thing it was which he feared might happen. And the young man said "He likes to think he has these things and to have the operations done upon him, and besides did I not do this he would send for another man who would then get the fee. And it would be dreadful if he got well before he undertook the operation. If he dies his family will hold me in honor for having done much for him and if he gets well he will thank me. Besides I have his check." And the old man walked sadly away while the young one got into his automobile and told his chauffer to drive him rapidly through the most crowded streets.

AND THE MORAL OF THIS IS THAT CONCEIT AND CONFIDENCE COLLECT THE CASH WHILE HUMILITY GETS THE HOOK.

SOCIETY REPORTS.

Abbeville, no report, 4th month.
Anderson, no report, 6th month.
Aiken, no report, 2d month.
Bamberg, no report, 6th month.
Barnwell, no report,
Beaufort, no report, 6th month.
Charleston no report, 2d month.
Cherokee, no report, 2d month.
Chester, no report 6th month.
Clarendon, no report, 6th month.
Colleton, no report, 5th month.
Darlington, no report, 6th month.
Dorchester, no report, 6th month.
Edgefield, no report, 6th month.
Fairfield, no report, 6th month.
Florence, no report, 6th month.
Georgetown, no report.
Greenwood, no report, 6th month.
Hampton, no report, 6th month.
Horry, no report, 6th month.
Kershaw, no report, 6th month.
Laurens, no report, 6th month.
Lee, no report, 6th month.
Lexington, no report, 2d month.
Marion, no report, 2d month.
Marlboro, no report, 6th month.
Newberry, no report, 2d month.
Oconee, no report.
Orangeburg-Calhoun, no report, 6th month.
Pickens, no report, 5th month.
Columbia, Richland Co., no report, 5th mo.
Saluda, no report, 6th month.
Spartanburg.
Sumter, no report, 6th month.
Union.
Williamsburg.
York, no report, 2d month.

MEDICAL SOCIETY MEETING.

Doctors of Fourth District to Gather in Greenville.

(The Charleston News and Courier, Oct. 6.)

Greenville, October 5.—Entertained by the Greenville County Medical Society, the Medical Society of the fourth South South Carolina district will hold its annual meeting in this city on November 21, according to plans now being arranged by the County Society.

The membership of the Society is about two hundred, representing the medical profession in Greenville, Anderson, Spartanburg and Pickens Counties. A large meeting is expected, and while nothing definite is known of the topics of discussion yet, it is stated than an attractive scientific programme will be arranged.

SPARTANBURG.

Spartanburg, S. C., Sept. 30, 1910.

The Spartanburg County Medical Society held its regular monthly meeting with a very small attendance, there being present only the following: Drs. Boyd, W. H. Chapman, Fike, Gantt, Jefferies, S. T. D. Lancaster, W. A. Smith, D. L. Smith and D. H. Smith, the latter of whom was elected a member at this meeting. Dr. Wm. J. Keller who has recently

moved to Spartanburg, was present as a visitor. The essayists appointed to read papers at this meeting were not present, but two very interesting cases were reported by Drs. D. L. Smith and J. L. Jefferies.

The society requested that Dr. James McIntosh, of Columbia, be invited to meet with them in November.

L. Rosa H. Gantt, *Secretary.*

UNION.

October 6, 1910.

Editor S. C. Med. Journal,
Charleston, S. C.

Dear Sir:

I am proud to write you that the Union County Medical Society is prospering as she never has before. Our meetings are weekly, and now for the last two months we haven't missed a meeting night that there wasn't a full attendance,, all gathering promptly, and full of enthusiasm.

One of our greatest difficulties is in getting some of our members to prepare papers. So, realizing this, we thought of the following plan: For the secretary to prepare ten (10) questions, as practical ones as possible, and have them placed on a black-board, and as soon as all formal and regular business is transacted a blank paper is given to each member to answer those questions. There is no signature to the papers and no one allowed to see them but the secretary, who corrects and comments upon them. We still insist upon essays, which we are able to have prepared about three nights out of five. There is no doubt that Union County Medical Society is striving to increase medical intelligence and higher medical ethics.

I am sorry to report that we have to give up Dr. Crown Torrance, who has located in Charleston, S. C. It is a loss to any locality or medical society to lose such a personage as Dr. Torrance—a man of zeal and integrity, with a full knowledge of the meaning of the words professional ethics and one who knows how to put it into practical use.

Dr. Torrance has just returned from Chicago where he spent six months or more studying the eye, ear, nose and throat. His practice will be limited to affections of those organs. What is our loss is Charleston's gain.

But am proud to say we have a man in Dr. T. P. Kennedy, who has cast his lot with us, one who will measure up to all that Dr. Torrance stood for. Dr. Kennedy recently graduated at the Tulane University, and immediately after locating in Union identified himself with our society. He is one of our most enthusiastic members.

Programme for our next Meeting.
Essay by Dr. O. L. P. Jackson.
Report of Clinical Cases.
Business.
Quiz Course.
Adjournment.

I shall try to give you another letter soon, though my time is pretty well taken up in preparing questions for every Monday night. I am,

Yours very truly,
Robert R. Berry, *Sec'y.*

WILLIAMSBURG.

To The Journal of the S. C.
Medical Asociation,
Charleston, S. C.

At the last meeting of the Williamsburg County Medical Association it was adopted that the president appoint a committee to secure evidence against all illegal practitioners of medicine in the County. Drs. Eady, DuRand and Lynch were appointed to secure evidence against Mr. W. L. Whitehead, of Lake City, S. C., and have a warrant issued for him, charging him with practicing medicine without a license.

We had the warrant issued, placed in the hands of the sheriff; Whitehead was

at once arrested. He gave bond until a certain date for the preliminary; when this date arrived he waived the preliminary. Court convened in our County last Monday, Oct. 3d; the necessary papers were prepared, handed to the grand jury for investigation, and in a few hours they reported on the matter, and "reeported no bill."

In this case we had "direct evidence," had witnesses that had had Mr. Whitehead regularly as a physician for years in their family, and would go on the stand and swear it and that they paid him for his services. Produced Rs from the different drug stores in his handwriting. Also a number of physicians had been in consultation with him and would go on stand and swear to it. The law says any person shall be regarded as practicing medicine, within the meaning of this act, who shall treat, operate on or prescribe for any physical ailment of others, except those engaged in the practice of osteopathy. Now, Mr. Editor and fellow members of the South Carolina Medical Association, I do not feel that we have been treated right, and will thank some member to advise me what to do in this matter. The party has no license, and is doing a general practice in this State. I am informed that this party is the only illegal practitioner in Williamsburg County, and we want to get him in good shape.

W. S. Lynch, M. D.

CURRENT MEDICAL LITERATURE.

THE DIAGNOSIS OF LEPROSY.

(Journal of the A. M. A., Sept. 10, 1910.)

Long association with the Louisiana Leper Home has given us an opportunity for the observation of leprosy, and we hope that this, together with the importance of correct and early diagnosis, in countries where leprosy is likely to occur, will justify the present discussion of this subject. We are not submitting any new points in diagnosis but rather argue the need of a practical presentation of the matter for the general profession, especially in our own country, where every now and then a notable case proves an ignorance of essential points which should be known. The trouble in diagnosis lies more with atypical cases, with incipient tubercular cases and with those anesthetic cases which present no longer active skin manifestations. Another source of confusion in diagnosis lies in the changes that appear in lesions during periodic occurrence of exacerbations accompanied by lepra fever.

Like syphilis, leprosy has often been divided into stages and types, but, as in syphilis the value of such diagrammatic classification of leprosy is greatly impaired by the fact that the types are often mixed and that the lesions that should be present in one stage are often found in another.

It is highly important that the cardinal symptoms of leprosy should be learned by the officers of the public health so that importation of leprosy may stop.

THE DOCTOR AS A WITNESS.

John Ashley, M. D., Bloomfield, Mo.

(The Journal of the Missouri State Medical Association, Sept., 1910.)

In the pursuit and practice of his profession the doctor is often called upon to testify in court. Matters coming under his notice as a physician or surgeon are often made the subject of legal inquiry, and he may be asked to tell the court what he knows in relation to them.

When called as an expert, to pass a professional judgment upon the medical

aspect of the facts in evidence, he should be careful to confine himself to the strictly medical or scientific phase of the case, and not to trespass on the province of the jury and express an opinion on the merits of the case. His answer to the hypothetical question should be made according to his best judgment and in all good conscience, regardless of the wishes of the side calling him or the size of his fee.

The doctor should be an ideal witness. On the witness stand he is in the limelight. For the time being the dignity and honor of a great profession are in his keeping, and he should so acquit himself that they shall issue from the ordeal untarnished.

A LIST OF THE TROPICAL DISEASES OBSERVED IN THE REGION OF SAN FRANCISCO BAY, CAL.

By Creighton Wellman, M. D., Oakland, California.

(N. Y. Medical Journal, August 13, 1910.)

It is not realized by many that San Francisco Bay is one of the chief guardians of the health of the nation, that California occupies a special position of responsibility to her sister States in the matter of tropical disease. Not only are tropical diseases of many sorts being constantly introduced through the Golden Gate, but it should be remembered that much of California with its equable climate must be classed by the students of the geography of disease as part of the subtropics. There is no winter to break in upon the routine of tropical parasitic infections which may be imported and they are consequently able to become endemic. Malaria, rodent plague, and amœbic dysentery are all three illustrations of this remark. During several months of study and teaching the writer has encountered and had reported to him in the region of San Francisco Bay a number of tropical diseases of which a list is herewith given. It will probably be a matter of surprise to some that so long a list of tropical affections are found in any locality in the United States:

Amœbiasis, Schistosomiasis, Bubonic Plague, Endemic hæmoptysis, Cochin China diarrhœa, Pellagra, Beriberi, Intestinal parasites, Malaria, Filariasis, Gangosa, Skin Diseases, Sprue.

HYSTERIA IN ITS RELATION TO GYNECOLOGY AND OBSTETRICS.

By George F. Butler, A. M., M. D., Wilmette, Ill.,

(The Virginia Medical Semi-Monthly, Aug. 12, 1910.)

Hysteria is an unstable state of nervous equilibrium in the genesis of whose manifestations everything occurs as if the psychic and the somatic phenomena were two manifestations of the same biologic facts.

The pains and physical disorders of hysteria, far from being capricious, are traceable to an origin—some incident, some pain, some action, which was associated with an acute momentary psychic agony. The process of conversion is an involuntary escape from an intolerable emotion comparable to the physical pain sometimes sought for intense grief. The patient wins relief from the tortured emotion, though at the expense of psychic abnormality, of a more or less divided state of consciousness and of physical pain, or else anesthesia. This condition may develop on a hitherto sound organism, or it may appear in congenital instability or on a neurosis due to autotoxæmia, traumatism, insolation or allied conditions.

The tendency of the condition to center around the genitalia arises from the inclination of psychic perturbations to col-

lect there since the sexual system, more than any other, exerts emotional power over the individual, his morals, as well as social questions. The vicious circle of pathology is no where better illustrated than in these relations between hysteria and the genitalia. The latter may be so disturbed as to upset the equilibrium of the nervous system in such a way that they rise into consciousness, and by removing inhibitions on nervous explosions produce temporary, albeit lengthy, hysteriod states.

Hysteria in connection with obstetrics involves many problems of internal medicine, neurology and psychiatry not much discussed because the essential elements are ignored. Pregnancy is looked upon by the mass of practitioners as a purely normal process, despite the undeniably frequent pathologic results which flow from it. "Pathologic," as Virchow says, "does not necessarily mean harmful; it does not indicate disease. Disease in Greek is *nosos* and it is nosology that is concerned with disease. Every departure from the physiologic norm previously existing in a pathologic event." So far as the mother is concerned pregnancy is a pathologic disturbance of the balance previously existing in the organism.

TWO REMEDIES FOR RACE SUICIDE.

(The Journal of the A. M. A., Sept., 17, 1910.)

"The best crop is the baby crop," said Mr. Roosevelt at Ames, Iowa, recently. True, but what shall it profit a nation if it produce ever so large a crop of babies but fail to keep them alive until they grow to years of maturity and usefulness? That nation is the strongest which has the largest number of mature, healthy and capable men and women. Mr. Roosevelt has done great service in decrying race suicide and urging a larger birth-rate. There are, however, two ways in which a nation can annihilate itself. One is by a diminishing birth-rate and the other is by an increasing death-rate among infants and young adults. The child which dies before it reaches maturity is a dead loss to the community. If Mr. Roosevelt will take up, with his accustomed vigor, the conservation of existing lives, in conjunction with his campaign for an increase in the number of new lives, as a combined remedy for race suicide, he will aid a growing and inevitable reform and will vastly increase the obligations of the country to him for his services.

UNHYGIENIC CIGAR-MAKING.

A matter worth the attention of health authorities is afforded by the custom among cigar-makers of biting off the tobacco at the end with their teeth and finishing the cigar by plastering down the outside leaves with saliva. We cannot say how extensive this custom is, but from our acquaintance with cigar-makers it appears to be not uncommon. The excuse given for this unsanitary method is that, while the managers do not actually demand it, it is practically impossible to finish a cigar to meet the demands of the foremen without resorting to it. The practice if generally known ought to diminish the sale of cigars on esthetic considerations alone, to say nothing of the very obvious danger of the transmission of disease—tuberculosis, for example, which is quite prevalent among cigar-makers. The practice is injurious not only to the customer, but to the workman as well. The frequent occurrence of functional stomach disease, among them, chiefly hyperchlorydria, is at least greatly favored by this practice.

PHARMACOLOGIC FETISHISMS; ANOTHER CHALLENGE TO THE ICONOCLAST.

The *Journal-Record of Medicine* (Atlanta) protests in its August number as follows: Barton (The Journal A. M.

A., July 23, 1910) makes an attack on a number of well-known drugs, such as calomel, aconite, ammonium chlorid, sweet spirits of niter, veratrum viride, etc. The matter seems to have been considered exclusively from the standpoint of animal experimentation or at least one would judge so from the nihilistic views expressed. So at variance are Barton's ideas with those of thousands of practitioners who are daily using these remedies, that a protest hardly seems necessary. Whether calomel acts as a cholagogue or as an intestinal antiseptic matters not at all to the patient with intestinal auto-intoxication or the so-called biliousness. Incontestable facts have proved calomel to be the best remedy to make the patient well under such circumstances, so why "split hairs" and bewilder the physician, who already has few enough of drugs with physiologic effects that may be relied on? Have we not all seen the diuretic effect of sweet spirits of niter? Are there sufficient millions of animals to prove it has no such action in human beings who are being treated with it? Spartein is maligned as being a worthless cardiac stimulant, but not a word said of its value as a renal stimulant; given hypodermically in 1 to 2 grain doses, the writer knows of no more dependable drug when suppression of the urine is feared—especially if it be given early, for instance, twelve hours before an operation where suppression is a danger. It is not to fight the individual battles of these separate drugs that this editorial is written, but rather is it intended to condemn the indiscriminate nihilism underlying the above article. For the sake of hyper-scientific accuracy Barton marshals before us an array of petty points of weakness of our most valuable drugs, and thus he weakens our faith in our best and most reliable friends and makes us all the easier prey to the alleged virtues of many worthless proprietary preparations so scientifically (?) heralded before us. If we are not to use these drugs which are condemned, in part if not totally, then what should we use in their stead? Can Barton provide for us more reliable drugs than those he declares so worthless?

WILLIAM JAMES.

By Ralph Reed.

(The Lancet-Clinic, Sept. 24, 1910.)

With the passing of William James the American philosophical and scientific world has been constrained to bid adieu to a notable figure. James was a physician, a psychologist and a philosopher, but it was simply his possession of the more general qualities of a great teacher and an intellectually honest man that endeared him to the American people. In 1869, when James was graduated in medicine, psychology was a minor branch of philosophy, and, if we are not mistaken, did not constitute a separate chair in any university. At that time psychology's chief stock in trade was a collection of faculties which were all properly labeled and preserved in separate mental compartments, somewhat after the manner of phrenology. Later, associational psychology had its rise; soon it took possession of the laboratory, and to-day psychology no longer constitutes, to use one of James' apt phrases, "a tumbling ground for whimsies," but is as much an experimental and definite science as physiology itself. With the bringing to a full bloom of this beautiful science, William James had not a little to do.

Psychopathology in America owes something to James. He at an early date made himself familiar with the work of Bernheim, Janet and others of the French suggestionists and psychopathologists, and did not hesitate to broaden his knowledge of normal psychology by the investigation of abnormal mental states. He made what was, we believe, the first attempt in this country to treat a case of dissociated personality by psychotherapeutic methods. He discovered the

value the hypnotic state affords in the study of normal psychology. Among his more strictly original contributions to psychology that are of interest to the phychopathologist are the Lang-James theory of the physical basis and origin of affective states, and the principle of reserve energy, a theory developed in his essay. "The Energies of Men." Sidis independently developed and demonstrated this principle, although on more strictly clinical and psychopathological lines.

William James was the son of a Swedenborgian minister, and while this may account for the fine qualities of breadth of view and intellectual honesty he possessed, we may also look to that fact for a strain of mysticism one may detect running through his life and work. Some twenty years ago he became interested in the work of the Society for Physical Research, and was instrumental in founding the American branch of that society. He never fully accepted the spiritistic hypothesis. It is unfortunate that since his death so much of the good work that he did has, in most of the current accounts of his life, been overlooked, and his apologetic attitude toward the Christian Science and spiritistic cults been unduly emphasized. That mediums are chiefly now concerned with reporting alleged messages from him seems a crude and pitable anticlimax to the history of a splendid career and a gentle and noble life.

FROM DEUTSCHE MEDIZINISCHE WOCHENSCHRIFT, BERLIN.

Aug. 18, XXXVI, No. 33, pp. 1513-1552.

(Journal of the A. M. A., Sept., 24, 1910.)

Ehrlich's "606" in Syphilis.—Herxheimer states that in 11 weeks' experience with "606" and 83 cases of syphilis no by-effects of consequence were noticed beyond the local painfulness and febrile reaction, all of which are avoided by the later improved technic. There was transient retention of urine in one neurasthenic patient, but urination became normal again at once after a sitz bath. The reflexes behave normally in all cases. According to Ehrlich's directions, the fundus of the eye, the heart, lungs, liver and kidneys were investigated in every case before the drug was given and any pathologic findings caused the patient to be excluded from this method of treatment. The findings in regard to spirochetes, the blood count and the Wassermann reaction were also recorded. No spirochetes could be discovered in 82 cases 48 hours after the injection, nor has recurrence been observed during the 11 weeks to date. In the other case the spirochetes did not seem to be affected by the drug, and A. Glück has encountered 2 similar cases; it seems as if certain rare strains of spirochetes must be insusceptible to the action of the drug, just as some have been known to be mercury-fast. In a case of universal psoriasis of 18 years' standing there was extensive desquamation after the injection but after 48 hours conditions had returned apparently to the same as before the injection. Otherwise, Herxheimer's experience has been favorable in regard to the efficacy of the drug and, like others, he mentions especially its prompt and effectual action in malignant syphilis. [Jellinek raises a warning voice not to be too hasty in judgment of the new remedy for syphilis, saying that the lay press throughout Germany is proclaiming it far and near as a prompt and radical cure for syphilis and is thus throwing down the barriers against venereal infection by removing the fear of syphilis. Jellinek comments further on the actual criminal optimism which is being fostered among the masses by the marvelous stories in regard to "606" that are issuing from the hospitals. He says this in the *Klin.-therap. Wochenschrift,* 1910, XVII, 80, in commending a pamphlet on sexual hygiene by Prof. S. Ribbing of Lund, Sweden, which he regards as a model work for young men on this subject.]

MANDELBAUM'S REACTION IN THE DETECTION OF TYPHOID CARRIERS, AND IN THE DIFFERENTIATION OF TYPHOID FEVER.

(Medical Record, New York, Aug., 6, 1910.)

Last Winter Mandelbaum published an account of his so-called "fadenreaction," which may possibly come to be regarded as a test of considerable value in connection with the persistence of virulent typhoid bacilli in individuals who once suffered from the disease. In its practical bearings a rough similarity with Wassermann's seroreaction in old syphilitics will be remarked; although the latter test rather shows that a person once had syphilis, than that he necessarily still has it, since while parasyphilitics commonly give very high percentage of positive Wassermann tests, yet they cannot be said to suffer from virulent syphilis in any sense of the word; they cannot communicate the disease, nor are they amenable to specific treatment.

There is an alleged difference in the Mandelbaum reaction as to recent and past typhoid. In the recent case, with a drop of blood transferred to a suitable medium which is slightly inoculated with typhoid bacilli, the latter exhibit a marked tendency to arrange themselves in chains or threads (hence evidently the term "faden" reaction), or else in clusters. All the bacilli are alike immobile. This phenomenon in itself is said not to be present in any other form of disease, for the typhoid bacilli remain isolated and movable in all others tested. The blood of a person who years before had passed through typhoid gives both chains and clusters of immobile bacilli, but a certain number remain isolated and movable. Mandelbaum found that at any period within twenty-four years this reaction was obtainable in old typhoids. The similarities and difference between the fadenreaction and the ordinary agglutination test are at once partly apparent, but a comparison of the two cannot be instituted in this connection.

Gaehtgens and Kamm have reported on the fadenreaction in the *Munchener Medisinische Wochenshrift* for June 28. They regard it as less trustworthy for the detection of a bacillus carrier than the opsonic index, for elevation of the latter is practically constant in a carrier, while the fadenreaction was often absent in 25 per cent. in these subjects. In the cases of fourteen known carriers the ordinary agglutination test proved useful in eleven, but of no value in the remainder. The fadenreaction did not seem to confer any greater degree of certainty. There were two negative results, while as in the agglutination test, the positive findings were not always typical and conclusive. Thus in regard to the mobility of individual bacilli, this was present or absent almost indifferently; and of two patients each infected three and one-half years before, one showed mobility, the other immobility. Several infected many years ago showed mobility in accordance with Mandelbaum's claim. But for that most interesting class of carriers, viz., those who apparently never went through the fever at all, three showed mobility and two immobility. Mandelbaum also insisted on the value of his reaction in distinguishing typhoid from paratyphoid and other pseudotyphoids. The authors conclude in this regard that when the "positive" finding is sufficiently characteristic it possesses some specific value (it was, however, present in two paratyphoid cases). Unfortunately, however, many so-called positive results are incomplete, or in other words dubious, and so possess no specific worth. A good positive result with an unsatisfactory agglutination test should be of value, but such a coincidence did not appear. On the contrary, the most positive results gave the highest agglutination figures. While the authors do not commit themselves as to the future value of this test, they appear to regard it as

an interesting development of serodiagnosis, but admit that the material upon which it was tested was not large.

SUITS AGAINST ILLEGAL PRACTITIONERS.

(From the Virginia Medical Semi-Monthly Editorial.)

We are pleased to note in the last number of the *Journal of the South Carolina Medical Association* the determined way in which one of its County Medical Societies has gone to work to prosecute illegal practitioners of medicine in that section. The Secretary of the society above mentioned says "This is just the beginning of a series of suits to rid the County, if possible, of such practices."

Dr. Herbert Old, of Norfolk, Va., a member of the Virginia State Board of Medical Examiners, early last Spring brought indictments against two men practicing illegally in Norfolk, mention of which was at that time made in this journal.

If doctors and societies throughout the country could oftener bring themselves to the point of prosecuting this class of fakirs, who so strongly appeal through their cut rates and impossible promises to a large class of our people, we believe the results accomplished in forcing such impostors to change their methods, or retire from the field entirely, would be amazing.

OPHTHALMIA NODOSA OR CATERPILLAR-HAIR OPHTHALMIA.

Walter R. Parker, B. S., M. D.
Professor of Ophthalmology, University of Michigan, Detroit, Mich.

(Journal of the A. M. A., Aug. 20, 1910.)

By ophthalmia nodosa is understood an affection of the eye caused by the entrance into the tissues of the eyeball of the hair of certain varieties of caterpillar. It was first described by Pagenstecher in 1883 as "caterpillar-hair ophthalmia," later by Wagenmann as "pseudotuberculosis," and by Saemisch as "ophthalmia nodosa." It shows a tendency to form tubercle-like structure, often showing nodules appearing singly or in crops, progressing mostly with exacerbation and remissions. The patient does not always give a history of caterpillar contact, the diagnosis being made with the aid of the microscope.

The disease is most common among those who work in the woods and fields. In most cases, the caterpillar falls or is thrown into the eye of the patient, or more rarely the infection occurs through free hairs, as in the case here reported. Ralzeburg pointed out the varying susceptibility of different persons, and Teutschlaender proved by experiments on himself that the skin varies as to susceptibility according to its thickness. He obtained a marked reaction on the thin skin of his forearm, but practically none from the thicker skin of the finger, the same caterpillar being used in both tests. The hairs have been demonstrated in the conjunctiva, episclera, sclera, cornea, iris and in one case in the choroid.

As a rule, the first symptoms appear soon after the trauma, although in exceptional cases no symptoms appear until the nodules are present. When the cornea is involved the initial symptoms are often most severe. They consist of the sensation of a foreign body in the eye, itching or burning, with lacrimation and photophobia, all being heightened by rubbing. These symptoms are followed by swelling of the lid, pericorneal injection and edema. There is usually loss of corneal epithelium, either through wounding by the caterpillar, or through the rubbing by the patient. The initial stage continues as long as the hairs cause irritation, either mechanically or chemically, or until the hairs penetrate the tissues and become encapsulated, which occurs from the fourth to the eighth day (Teut-

schlaender), At the end of the second week or the beginning of the third, the first nodule or nodules appear, thus ushering in the typical state of opthalmia nodosa.

THE DIAGNOSIS OF CHOLERA IN THE PHILIPPINES.

(Journal of the A. M. A., Aug., 27, 1910.)

Erroneous diagnosis have been responsible for the failure to destroy foci of cholera infection in the city of Manila, according to Victor G. Heiser, Director of Health (*Quarterly Report of the Bureau of Health, Fourth Quarter,* 1909). In the last quarter of 1908, 129 cases of meningitis were reported to the health authorities. In order to verify the diagnosis in a number of these cases autopsies were made, and these showed that the cause of death was cholera and not meningitis. In view of this, it was decided to hold autopsies in all cases reported as meningitis. This had the effect of increasing the diagnostic acumen of those signing death certificates and in the subsequent quarter only 34 cases of meningitis were reported. Twenty-eight of these were autopsied, and only 2 proved to be meningitis; 17 were cholera; 4 were beriberi; 1 was empyema and 4 were undetermined. In the last quarter of 1909 there were 151 deaths from cholera in Manila. The total death-rate in Manila for 1909 was 35.50 per 1,000, as against 47.62 per 1,000 in 1908.

COMMUNICATION OF INFECTION BY EGGS.

Interesting experiments have been made by the imperial health office to determine the ways in which disease may be conveyed by eggs. The infection of hen's eggs with germs may occur by the contamination of the ready formed egg by germs which are either on the outside of the shell or in some cases may penetrate the shell into the egg itself. Micrococci and non-motile organisms appear not to possess this property of penetrating the shell under ordinary circumstances so long as the egg is kept dry. The principal source of the germs in normal eggs is an infection during their formation; 54 per cent. of the eggs investigated contained germs. The communication of disease by eggs may occur either from the germs on the shell or from those contained in the egg itself. In the transmission of disease by germs the ability of the germ to resist external influences, such as drying, is of great importance. This method of dissemination of chicken cholera is of minor importance. Paratyphoid bacilli remain viable on egg shells for 10 days and longer and they may also penetrate the shell into the egg itself. For this reason it is not impossible that, exceptionally, hen's eggs may be the source of a paratyphoid infection of man.

SYPHILIS OF THE INNOCENT.

A number of cases are cited by Brouner in support of his contention that syphilis, one of the most contagious infections afflicting mankind, is undoubtedly on the increase as judged by hospital and private practice, and that many estimable, respectable people acquire this disease innocently, and for a long time are unaware of the real nature of their illness. These innocent victims innocently infect others, and the most frequent source of infection is by using public drinking cups, public towels in bathrooms and improperly washed cooking utensils, etc. Brouner would prohibit the practice of passing around drinking water in public places of amusement because of the danger of infection that lurks in them. Hospitals, dispensaries and public buildings, he declares, should not be provided with public drinking cups, but with individual paper cups. The public should also be instructed as to what to demand from their dentists in the way of aseptic

instruments. It is too common a practice for dentists not to pay any attention to the advances made in knowledge of asepsis.

UGESKRIFT FOR LÆGER, COPENHAGEN.

July 21, LXXII, No. 29, pp. 859-884.

(August 3, 1910.)

Cancer of the Throat.—Schmiegelow entreats the general practitioner to appreciate the fact that there are very few organs in the body from which cancer—diagnosed in time—can be removed with as good prospects of a complete cure as from the throat. He has encountered 48 cases of primary endolaryngeal cancer, the patients all male but 8, and all were over 40 except one woman in the twenties and one man and one woman in the thirties. The growth was in vocal cords in the majority, and hoarseness was the first symptom to call attention to the throat in 37 cases. As a rule the hoarseness developed gradually but in a few cases it came on acutely with a catarrhal laryngitis and after a series of remissions became chronic. Even in the laryngoscope the picture may be apparently that of an ordinary chronic catarrhal affection. A tuberculosis infiltration of the vocal cord may also deceptively simulate cancer. He has had several such cases in which no signs of tuberculosis could be detected elsewhere and the tuberculous nature of the process was distinguished only by microscopic examination of an excised scrap of the tumor. In 25 of his cases the cancer was differentiated in this way; in the others the disease was at a stage beyond all doubt. The excised scrap must be taken deep enough to be truly characteristic. In 2 there was both a cancer and a benign growth in the same throat. Seven of the 20 patients whose laryngeal cancer was removed by thyrotomy from 1 to 10 years ago are still living; another died of tuberculosis 4 years after the operation; another of gastric cancer after 8 years, and another of rectal cancer after 17 years. The proportion of permanent cures without local metastasis was thus 50 per cent. in the thyrotomy cases; 20 per cent. of the 5 cancers removed by the endolaryngeal route, and 20 per cent of the 5 removed by total resection of the larynx. Thyrotomy may be regarded as an efficient means of curing cancer in the larynx if diagnosed early. The endolaryngeal route exposes too much to local recurrences later. In one of his cases the local recurrence did not develop until after an interval of 7 years, and the man is still living, 3 years later, but the growth is now inoperable. Age is no contra-indication to thyrotomy. One of his patients was a man of 71 who is still in good health 4 1-2 years after the thyromy.

THE DOCTOR AND THE DONKEY.

(Critic and Guide, August, 1910.)

The following incident is related in an Italian journal: A medical practitioner was peacefuly going his rounds on a bicycle in a country district when suddenly a donkey started pursuit. The doctor tried hard to escape, but after a fast run of two kilometers he was overtaken by the donkey, which attacked him furiously and injured him in various parts of the body. We present our respectful sympathies to our unfortunate brother, who we hope has by this time recovered from his injuries. Apart from the personal suffering inflicted upon him, the incident might almost be taken as a parable illustrating the working of the antimedical bias. Do we not every day see medical science, going peacefully on its path of benificence, attacked, with aggressive brays, by folly and fanaticism? What is it that excites their animosity? Probably they give no better account o fthe matter than their symbolic

representative which ran down the doctor. If we may attempt to explain such a mystery, we should say that in both cases it is the instinct of self-preservation that supplies the motive of the hostility. The donkey, doubtless, had a misty suspicion that the curious looking thing moving swiftly along in some way threatened his welfare. In like manner the charlatan and quack forsee that the triumph of science means their own extinction.

SYPHILIS AND INSANITY AS DETERMINED BY THE WASSERMANN REACTION.

(St. Louis Medical Review, July, 1910.)

C. B. Ensor, M. D., of Baltimore has made a very interesting experiment in regard to the Wassermann Reaction in cases of insanity confined in the Mount Hope Retreat of 262 male patients. Tested by the Wassermann method, a positive reaction was obtained in 58, or in 22 per cent. of the total male population. Of the 262 patients, a history of syphilis was given in only 3 per cent of the total, and only 14 per cent. of the patients showing a positive reaction admitted having syphilis, though most of them acknowledged exposure, not having had gonorrhea; 86 per cent. of the patients with positive reactions thus denied having had syphilis at anytime. On the other hand, a history of syphilis was admitted where the reaction was negative in 2.6 per cent. of the total admissions. Of the 58 positive cases, 69 per cent. of the patients have been in the institution one year and under, 12 per cent. have been there two years, and 19 per cent. have been there three years and over.

The positive cases are classified as follows:

	Per cent.
Chronic alcoholic insanity	15.5
Dementia praecox	18.9
Dementia paralytica	17.2
Maniac depressive insanity	15.5
Organic dementia	20.4
Paranoia	3.4
Involutional insanity	6.8
Constitutional insanity	1.7

Of 21 patients from other sources, 16 were paretics with a positive reaction in all, and of 27 cases of paresis collected from all sources 96 per cent. of patients gave a positive reaction. Of seven cases of tabes 83 per cent. of reactions were positive, and of five cases of cerebral syphilis four were positive, while in the only negative case the patient had been receiving mercurial injections for the previous six months.

THE INTRAMUSCULAR INJECTION OF MERCURY, WITH SPECIAL REFERENCE TO THE INSOLUBLE PREPARATIONS.

By Eugene Carson Hay, M. D., Hot Springs.

(The Journal of the Arkansas Medical Society, July, 1910.)

The deep intramuscular injections of mercury continue to grow in favor as a very effective and popular method of administering mercury, and is far superior in promoting the ultimate cure of syphilis and bringing the disease under rapid control than when administering it by mouth. As to the comparative value of the soluble and insoluble preparations, I will briefly state that the insoluble are so much more effective, less painful (except calomel), less prone to produce nodicities, and so much more lasting in their effects than the soluble salts that their therapeutic values are not to be compared. For a number of years I used the soluble preparations exclusively when giving injections. Five years ago I commenced the use of the insoluble preparations. My latest formula as I now use is as follows:

Double distilled metallic mercury, 1 oz.

Pure lanolin, not sterilized, 1 oz.
Camphoric acid, 1 1-2 drams.
Pure beechwood creosote, 1 1-2 drams.
Glycerine, 1 dram.

Containing 40 per cent. mercury by weight.

The dose is from 1 to 3 minims. The minimum dose twice a week or the larger dose once a week.

The intramuscular injections of mercury, both the soluble and insoluble, have been criticised and attacked very severely by some of our greatest syphilographers. I repeat what I said in a previous article, that I greatly prefer the inunctions of mercury for routine work to all other methods. The soluble injections have grown into disfavor with me from my experience of several years in their administration, and I now rarely use them; but some results obtained from the use of the insoluble have been so gratifying that I consider them a very valuable and potent therapeutic agent and a method of of administering mercury that I would be very reluctant to discard entirely. In some stubborn cases I have used injections supplementary to inunctions, giving one or two injections a week during their course of rubbings. In quite a number of cases I have had some very excellent results. Before closing I wish to say a few words of precaution in relation to stomatitis, produced from the grey oil injections. Great care must be taken of the teeth. They should be thoroughly cleaned by a competent dentist before instituting a course of injections. The patient should then call on the dentist at least two or three times a week and have them closely inspected and any slight irritation should be touched up with iodine and carbolic acid mixtures or nitrate of silver.

Dr. J. J. Gaines, in the Journal of the Missouri State Medical Association for September, writes a very forcible article on the founder of the school of Osteopathy and ends with a very scathing criticism of "osteopathic physicians." He says, they are utterly without a principle of ethics, they abuse and villify the regular school of medicine which they owe for their very life. See the various "journals they publish" and read the pages of slander and lies. See the teeming ignorance and dishonesty. Waging a dirty and undermining warfare on an honorable profession of which they are as ignorant as Baalam's ass, and which will live centuries after the osteopath shall have changed into some other form of fakery. He gives a brief of a case in which Chas. E. Still, President Still Infirmary, was sued for $10,000 for malpractice, and says it would pay anyone to read the horrible details of this case, which would settle the merits of osteopathy in any sensible brain.

FACTS AND PROBLEMS OF RABIES.

By A. M. Stimson, Hygienic Laboratory, Bulletin No. 65.

(June, 1910.)

The earliest reference to rabies is said to be that of Aristotle in the fourth century, B. C., or possibly Democritus in the fifth century. Hippocrates who preceded Aristotle by about a half-century, is said to have made no mention of the disease. It is natural, however, that in those days of very crude methods of diagnosis, the disease was confused with other nervous affections and that because of its long period of incubation, its outbreak in man was not connected with injuries received from animals. The first extended description was given by Celsus in the first century, A. D.

The history of rabies, as shown by its literature, is extremely instructive as showing how much and how little was known in the past ages. Among the superstitious and erroneous beliefs anciently entertained, and in some regions rever-

enced to the present day, may be mentioned that of Avicenna that the little figure of dogs, in reality blood clots, passed in the urine of hydrophobia patients after the administration of cantharides, were the cause of rabies and that their elimination in this manner would result in a cure. The belief that the removal of the "mad worm," which proves to be a normal cartilage in the tongue, would prevent dogs from taking rabies, was honored by an edict from Frederick the Great providing for the carrying out of the measure. A popular means of diagnosis at one period consisted of stripping feathers from the breast of a living fowl and applying the denuded area to the wound. If the dog was rabid, the fowl would die; but if the fowl remained well, no anxiety need be felt. The modern "madstone" still believed in and patronized in portions of the United States, is composed, according to White of tricalcium-phosphate. The belief in these stones is a positive danger, since they possess none of the powers attributed to them.

The general statement may be made, that there is no portion of the globe where man and other terrestrial mammals can live which is not potentially capable of harboring rabies. Rabies occur from Greenland to the Philippine Islands. Rabies was observed on this continent early in the latter half of the eighteenth century.

The most generally accepted view as to the manner of the pathogenesis of the micro-organism causing rabies is that upon its introduction beneath the epidermis or mucosa it finds its most favorable or perhaps its only favorable medium for propagation in the nerve endings or torn fibers of the region. Along the course of these it develops, not disturbing their function although rendering them infective, until the central nervous system is reached. At the same time, there occurs the production of a toxin, extra or intracellular, which is responsible for some of the symptoms. Rabies present at least two clinical types. These are the furious or excited, and the quiet, silent or paralytic.

The subject of immunity in rabies, as in many other infectious diseases, is one of great complexity, entailing the study of all phenomena bearing upon the rationale of the disease, natural and experimental. Two important facts are known with regard to *acquired immunity*. First that man and animals may be rendered immune by inoculations with the modified virus of rabies; second, that their blood acquires "rabicidal" properties, i. e., the power to render inert the virulent material exposed to its action *in vitro*.

Any conception of immunity in rabies necessitates a knowledge of the properties of rabies virus. Virus in its fixed condition as indicated by its constant and irreducible incubation period, is in several ways different from street virus. If we examine a large number of original descriptions of the properties of fixed virus we shall find that one author will say that in rabbits inocculated subdurally with fixed virus the animals show decided symptoms on the sixth day.

Up to the present time no cure for the developed disease has been discovered; for the present we must treat developed rabies in man symptomatically.

THE TREATMENT OF SPASTICITY AND ATHETOSIS BY RESECTION OF THE POSTERIOR ROOTS OF THE SPINAL CORD.

By Charles H. Frazier, M. D.

(Journal of Surgery, Gynaecology and Obstetrics, Sept., 1910.)

There is no functional disturbance of the extremities which has so baffled attempts at relief, surgical or otherwise, as spasticity of the muscles whether of spinal or cerebral origin. The presence of an organic lesion in the motor tracts,

causing an interruption in the transmission of impulses from brain to cord and from cord to peripheral nerves inevitably give rise to a functional disturbance, varying in its distribution according to the situation of the lesion, characterized chiefly by paresis and muscular contractures. Spasticity is believed by some to be a reflex process, originating in sensory peripheral impulses from the skin, joints, ligaments, and especially the muscles. If we admit that spasticity or spastic muscular contractures are reflex disturbances, unrestrained by cortical impulses, one way, if not the only way of controlling them, is to remove at least one link in the chain of the reflex arc. Without doubt the most important technical consideration is the selection of the roots to be sacrificed. Whether or not it may be possible to respect a series of five, six, or seven successive roots without permanent disturbance of sensation or reflexes in a given extremity, it is unquestionably true that the desired end may be attained, the spasticity relieved, by respecting four out of seven of the total number of roots supplying a given area. On the other hand if too few roots are resected the results may not be as satisfactory. The restoration of voluntary movements by no means implies restoration of function in the sense of practical usefulness. Theoretically we abolish the contractures and restore approximately the normal range of excursion in the movement of the limb.

GASTRO-INTESTINAL AUTO-INTOXICATION AND MUCUS ENTERCOLITIS FROM THE VIEWPOINT OF SURGERY.

By James C. Wood, M. D.

(Journal of Surgery, Gynaecology and Obstetrics, Sept., 1910.)

The pages of current medical literature afford abundant evidence of the interest now being taken in the various phases of auto-intoxication. The profession is enormously indebted to the bacteriologists who have worked out the flora of the gastro-intestinal canal. Our theory of the significance of the part played by the secretions pouring into this canal, from the cardiac orifice of the stomach to the anus, and of the part played by the phagocytes in contending against disease producing micro-organisms, which invade the system through the intestinal walls, is being rapidly recast.

Alexander divides auto-intoxication into two great types, the endogenous, whose products are the expression of perveted metabolism and the exogenous, which results from changes in substances which have never entered the circulation as a whole. In the first type auto-intoxication may give rise to amenorrhoea, dysmenorrhoea, menorrhagia, leucorrhoea, etc. The second type includes the cases of uterine malposition and tumors, which, by interfering with the function of the bowel and acting in a reflex way so as to disturb digestion, give rise to auto-intoxication. In the third type auto-intoxication is at once the product of the pelvic states and aggravates these.

The most diverse views prevail at the present time regarding the causation, pathology and treatment of the gastro-intestinal auto-intoxication and so-called enterocolitis. The association of the two conditions is frequently observed. A most common symptom of chronic appendicitis is the discharge of mucus per anus because of the enteritis excited and perpetuated by the inflamed appendix—there is increasing evidence going to show that a causal relationship exists between chronic appendicitis, with or without mucuous enterocolitis, and gastro-intestinal auto-intoxication. Relief following surgical work, when indicated, is usually immediate.

BILHARZIOSIS AND HOW TO PREVENT IT.

By James F. Allen, M. D.

(The Lancet, Aug. 6, 1910.)

This disease is caused by a parasite which exists in the water of rivers, streams and ponds; that it enters the body directly from the water by the urethra or anus during long immersion and that the longer the immersion the greater is the danger of invasion. We are aware that brief bathing in infected water, either at home or in a river, if followed by thoroughly drying is absolutely safe; that the prepuce most materially assist invasion of the urinary tract; that circumcision gives comparative protection and that finally the parasite cannot reproduce itself within the human body. If, therefore, precautions are taken to stop reentry, the disease will not advance, but, on the contrary will slowly recede, so that by a combination of precautions we can finally get rid of it.

In South Africa European children do bathe and swim in affected streams and spend too much time in the water—their clothes are a protection while the Egyptian children not wearing clothes become an easy prey to this disease. Similar facts must have occurred in ancient as in modern Egypt. Thus step by step the Egyptions in prehistoric times would be led to the adoption of circumcision as a protection and its success would confirm the practice. Bilharziosis is a continual menace to the white population of South Africa—it is to be found in the cape Colony, the Orange River, the Transvaal, Natal and in all the native protectorates. In Egypt there would be considerable trouble probably in getting the Mohammadan population to adopt infant circumcision. Mohammadan children contract bilharziosis before they are circumcised.

State instruction in this matter, together with facilities for infant circumcision, will cause serious and fatal cases of bilharziosis to disappear from Egypt and will make the disease as innocuous and as infrequent in that country as it is in South Africa.

PROPERTIES OF ASCITIC FLUIDS, ESPECIALLY IN CASES OF CANCER.

By Richard Weil, M. D.

(From the Department of Experimental Therapeutics, Cornell University Medical School, New York City.)

(Journal of Medical Research.)

Early in the present year, the late Dr. Eugene Hodenpyl, pathologist to Roosevelt Hospital, in the City of New York, requested the writer to make examination of the biochemical properties of a certain ascitic fluid. At the same time, a number of other ascitic fluids from human individuals were obtained as follows:

1. Dr. Hodenpyl.—A pseudochylous ascitic fluid derived from a case of spontaneous retrogression of a tumor of the breast, metastasing to the liver.

2. Dr. Oppenheimer.—A serous, ascitic fluid derived from a slowly progressive cancer with metastases to the abdomen.

3. Dr. Beebe.—Pseudochlyous fluid derived from a case of slowy progressing cancer.

4. Roosevelt Hospital.—Pseudochylous fluid derived from a case of cirrhosis of the liver.

5. Dr. Hodenpyl.—Serous fluid derived from a case of very slowly progressive abdominal cancer.

6. Mt. Sinai Hospital.—Serous fluid of pleuritic transudate in a cardiac case.

7. Dr. Anderson.—Serous pleuritic fluid. Carcinoma of breast removed 4 years ago. Recent metastes in pleura.

8. Dr. Southworth. — Ascitic fluid,

pseudochylous in character, at other times straw-colored. Case probably of tubercular peritonitis.

These fluids were tested according to a number of methods. It is well known that there is a marked tendency in a fairly large proportion of the cases of cancer for the serum to destroy or hemolyze the red corpuscles of other individuals. Accordingly, the lytic power of these fluids were tested upon the blood cells of cancerous and of normal individuals.

An attempt was made to discover whether any of the other tissue cells of the body were demonstrably more vulnerable to injury by the cancerous fluids than by the others in the series. Marked changes had occurred in many of the cells, but the sera from the tumor animals did not seem to have produced any specific effects distinguishable from those of the other sera. The results of the experiments detailed above have been almost entirely negative in character—that is to say, they have not indicated the existence of any specific character such as would serve to differentiate with certainty fluids derived from cancerous individuals from those of another origin. At the most it may be said that the results of some of the agglutination tests were suggestive. The data are therefore recorded simply as a contribution to the general subject of immunity in cancer.

FROM THE LAY PRESS.

DRASTIC ACTION BY PHARMACISTS.

(The Columbia State, Sept. 14, 1910.)

Pittsburg, Pa., Sept. 13.—Drastic resolutions tending toward legislation, vital alike to the drug trade and the public, some of which were almost sensational, marked the opening day of the 12th annual convention of the National Druggists' association in session here. President C. H. Hupt declared war on the indiscriminate sale of liquors in drug stores; emphatically announced that reform was demanded and that the reform must be brought about by the pharmacists themselves.

The Ohio Pharmaceutical Association presented a resolution protesting against the laws requiring druggists to take out a liquor license to enable them to sell whiskey on prescription, "thus classifying the drug store as a saloon, while another law forbids the sale of intoxicating preparations without a prescription."

The Chicago delegation demands the change of the name "wood alcohol" to "wood naptha" that "topers" may not be led by the similarity of names to drink the poisonous alcohol instead of whiskey.

An anti-suicide resolution recommended the restriction of the sale of carbolic acid to a mixture of one-third each—acid, glycerine and water—"a preparation that may be taken by would-be-suicides in large quantities without causing death." While another having for its object the suppression of the "dope fiend" demanded that proprietary medicines containing cocaine, chloral, morphine, codine and other drugs be sold only upon prescription.

The diagnosis of cases and prescribing by druggists was also condemned.

EMERGENCY HOSPITAL IN NEED OF FUNDS.

(The Greenville Daily News, August 14, 1910.)

The regular monthly meeting of the Charity Aid Society was held in the Board of Trade rooms, Wednesday morning, August 10. The routine business of the society took up most of the time.

The need, pressing need, of more funds for the work of the Emergency Hospital was clearly shown, when the report of the institution was read. There is only a few dollars left in the bank to the credit of the Charity Aid and not any for the Hospital.

To insure funds for the next few months' work the ladies decided to give two moonlight fetes, one this month and one in September. They feel very sure that the people of Greenville will endorse these entertainments with their presence. The time and place will be published later.

SENECA SCHOOL OPEN.

Enrolment of 250—Medical and Dental Inspection.

(News and Courier.)

Seneca, September 14.—The Seneca High School opened on Monday morning of this week under very favorable auspices. Among those who made enthusiastic and encouraging talks at the opening exercises were: The Rev. Kirkpatrick, the Rev. Blackman, the Rev. Driggers, Gen. Moors, from the lower part of the State; the Hon. F. M. Cary, Dr. E. A. Hines and Superintendent M. E. Breckman.

A large number of patrons and friends of the schools were out to witness the opening of the school. Thus far 250 pupils have been enrolled in the Seneca schools, and in a few weeks the number will be greatly increased.

The Seneca High School has the peculiar distinction of being the first school in the State to have medical and dental inspection of all pupils in the school. This is a new undertaking in the South, but is found in many Northern schools. Through the instrumentality of Dr. E. A. Hines the Seneca school has forged to the front in this very important matter. It is his desire to get a number of school boards in the State to adopt the system of medical inspection.

NEW DISEASES CLAIM MANY VICTIMS IN U. S.

(The Georgian's Weekly News Briefs—Week of September 23-29, 1910.)

Washington.—There were 569 deaths from infantile paralysis, 116 from pellagra, 55 from rabies or hydrophobia and 9 from leprosy in 1909 in the death registration area of continental United States, which comprises over 55 per cent. of the total population, according to the census bureau's forthcoming bulletin on mortality statistics for 1909.

Of the 569 deaths from infantile paralysis, 552 were white and only 17 colored. There was a somewhat greater number of cases among males and an increased mortality in August, September and October.

Pellagra is a new disease in the mortality statistics. Only 23 deaths were returned from this cause for 1908 and no deaths for any previous year except one for 1904. Such deaths undoubtedly occurred, but were not recognized and were consequently returned as due to other causes or as an unknown cause.

As the registration area includes only a small portion of the country in which pellagra is most prevalent, it would seem that many hundreds and perhaps thousands of deaths from this disease must occur each year in the United States. How many can never be known until systems of complete registration of deaths are more generally adopted.

TO PRACTICE IN JAPAN.

Doctor From Greer and Minister From Same Town Sail Soon.

(Columbia Daily Record, Sept. 30 1910.)

Dr. and Mrs. Stephenson will leave Greer on October 5 for California on a visit to relatives where they will spend a month. In November they will sail for Japan, where Dr. Stephenson will practice medicine.

MEDICAL EDUCATION AGAIN.

Difference in Degree of M. D. in America and Great Britain.

(New York Tribune.)

The latest number of The Lancet, which is devoted to the subject of medicine and surgical education, as a "students' number," affords a suggestive comment upon the recent controversy in this country over the standard of medical education in various schools and universities, and indicates that in the United Kingdom a standard prevails which warrants by example insistence upon the highest standards which the best American institutions have set up. Only a few years ago our medical colleges were generally granting the M. D. diploma to students of two years' standing who had begun with little if any more than a grammar school education. Now, a four years' course is generally required, for which practically all reputable institutions exact a preparation equal to that required for a college of liberal arts, while a large proportion require two years of actual college work, and at least one makes the completion of the college course and the receipt of the baccalaureate degree necessary for entrance. Let us compare this with the British system.

The general council of medical education and registration, which has in large the registration of students and practitioners, the prescribing of standards of scholarship and the removal from the register of practitioners guilty of "professionally infamous" conduct, requires for entrance upon a course of medical study a rigorous examination about equal to that which is here required for entrance to college. Thereafter there must be five years of study before the first, or baccalaureate, degree in medicine is granted, and further study and examination for the doctor's degree.

There are in the United Kingdom 22 universities and other bodies which the general council recognizes as competent to register, examine and graduate medical students, and most of them exceed the strict requirements of the council. Thus Oxford gives the M. D. degree only to those who have taken the A. B. degree and thereafter have given 39 terms, or 13 years, to university study. Cambridge gives the bachelor's degree in medicine after five and the doctor's after eight years of medical study. London University requires five and a half years for M. B. and two more for M. D. Durham demands five years for M. B. and two years of subsequent practice for M. D. Birmingham and Manchester are content with nothing less than five years for the first degree and grant the second a year later.

These facts are a reminder of the decided difference between the degree of M. D. in Great Britain and in America. Here it is granted at once to the medical graduate without a preliminary baccalaureate degree, and possession of it is generally if not universally prerequisite to engaging in independent practice of the profession. In the United Kingdom, on the contrary, there is a baccalaureate degree in medicine, and the doctor's degree is not essential to practice. Indeed, we believe that many competent and even eminent practitioners never received it, or certainly never make the common use of it which prevails in this title-loving country. The appropriate comparison is therefore between the British M. B. and the American M. D., and it appears that on the whole the requirements for the former are a little higher than for the latter—five instead of four years of study. That fact will generally be accepted as confirmatory of the wisdom of insisting upon at least a maintenance if not, indeed, a further advancement of our best standards of medical and surgical education.

NEW HEAD FOR HOSPITAL.

Philadelphia Woman to be Superintendent of One in Anderson.

(Special to The State.)

Anderson, Sept. 18.—Miss Racheal Bourke, of Philadelphia, has accepted the position of superintendent of the Anderson County hospital, and will report for duty on the 20th inst. She comes to succeed Miss Mary E. Stelling, who died recently in Columbia after serving the hospital here as superintendent since its establishment three years ago. Miss Bourke is a native of England, and has had a great deal of experience in hospitals. She was graduated from the Massachusetts general hospital and has served as superintendent of nurses at Cooper's hospital, New York, for 10 years. Miss Ora Paget, who has been acting superintendent since the death of Miss Stelling, and who has given eminent satisfaction to the hospital association, was not an applicant to succeed Miss Stelling. The Anderson hospital has been doubled in capacity recently and is now one of the best equipped in the South.

LEXINGTON DOCTORS INDICTED.

Three Charged with Practicing Medicine Without License.

(Charleston News and Courier, Sept. 21, 1910.)

Lexington, Sept. 20.—Among the most interesting indictments handed out at the present term of Court are those against three prominent physicians of the County, charged with practicing medicine and surgery without a license. They are: Dr. James Crosson, of Leesville, a brother of State Senator D. M. Crosson; Dr. W. A. Oxner, of Gilbert; Dr. O. C. Holley, of the Hollow Creek section, and Dr. Busby, of Steedman. The last named has never been arrested, it being alleged that he has left the County, his present whereabouts being unknown. Dr. Crosson and Dr. Oxner have been practicing for several years.

Under the law every physician must secure a license from the State board of examiners before entering upon the practice of his profession. It is for this violation that the indictments have been brought.

It is likely that the cases, or some of them at least, will be tried during the present term. The defendants are represented jointly by Efird & Dreher, E. L. Asbill and J. William Thurmond, of Edgefield.

DR. J. SOMERS BUIST DEAD.

Well-Known Physician Passed Away Yesterday.

Death Followed Illness of Three Years, During which Dr. Buist was Confined to his House—Held Many Positions of Honor Here, where he Spent all of his Life Except Four Years Passed in the Confederate Army—Funeral To-morrow Afternoon.

(Charleston News and Courier, Sept. 30, 1910.)

Dr. John Somers Buist, one of the best known physicians of this city, passed away at his home on Meeting Street yesterday just before noon. Death came to Dr. Buist after an illness extending over a period of three years, during all of which time he was confined to his house. Since suffering a stroke of paralysis three years ago he has been an invalid and unable to continue the practice of his profession. Dr. Buist is survived by his wife and six children, three of whom, Dr. A. Johnston Buist, Miss Mary Buist and Mrs. Walter Pringle, live in Charleston, while the others will reach the city in time for the funeral, which will take place in St. Michael's Church to-morrow afternoon at 4 o'clock.

Dr. Buist was born in Charleston on November 26, 1839, and was therefore in

the seventy-first year of his age. With the exception of four years spent in the Confederate army, his whole life has been passed in this city and its surroundings. He was a graduate of the College of Charleston and of the South Carolina Medical College, receiving his degree at the former institution in 1859 and at the latter in 1861. He also received the degree of master of arts from the College of Charleston.

Dr. Buist's war record was a splendid one. Upon the outbreak of hostilities he entered the Southern army as a surgeon and continued in the service until the end of the struggle. Serving for some time with the Palmetto Guard, he soon entered the regular army, and after a brief term of service at Fort Moultrie, was transferred to Virginia. Here he held the rank of assistant surgeon of the artillery of Hampton's Legion. He served in this capacity and with this command until January, 1863, when he stood the examination for promotion successfully at Charleston and became a full surgeon, being attached thereafter and until the surrender to Major John C. Haskell's artillery command in Lee's army. Among the battles witnessed by Dr. Buist were the seven days' battles on the Chickahominy, second Manassas, Sharpsburg, Suffolk, Culpepper, Gettysburg, Spottsylvania, second Cold Harbor, siege of Petersburg, Five Forks, Sailor's Creek and Appomattox. After the close of the war he returned home on a Federal transport in charge of a number of Confederate sick and wounded.

Following the re-establishment of peace, Dr. Buist practiced medicine in Charleston uninterruptedly until his illness came upon him and incapacitated him for further duty. He became city physician of Charleston shortly after his return from Virginia and his efforts had much to do with the organization of the health department during the troublous times which followed the disastrous struggle. He held the positions of surgeon of the Roper Hospital and of the United States Marine Hospital, adjunct professor of materia medica and adjunct professor of clinical medicine and surgery at the Medical College, commissioner of the Roper Hospital, president of the Medical Society of South Carolina and of the South Carolina Medical Association, vice-president of the New England Society, vice-chairman of the board of commissioners of the Charleston Orphan House, trustee of the College of Charleston, president of the College of Charleston Alumni Association, and member of the city board of health. He was a director of the Charleston Consolidated Railway, Gas and Electric Company, having been associated with the late Dr. J. S. Lawrence in the promotion of the electric railway system and the Isle of Palms as a resort. He was also a director of the Dime Savings Bank.

Dr. Buist was one of the leading Masons of Charleston. He was made a Mason in Washington Lodge, but later transferred his membership to Union Kilwinning Lodge, of which he became a Past Master. In the Scottish Rite he was a member of Delta Lodge of Perfection, Buist Chapter, Rose Croix, Bethlehem Council, Knights Kodash, and Benzebee Consistory. Some years ago, in recognition of his services, he was elected to receive the thirty-third and highest degree in the Scottish Rite, and he was one of the few thirty-third degree Masons of this community.

SONG OF THE GERM HUNTERS.

(From the Denver Republican.)

We have harried the germs, in spite of their squirms, and have slain the same in their lair;
We are after the fly with the baleful eye, and the 'sketer must say its prayer;

We have purified wells and have killed off smells that have risen unto the skies,
But in spite of our toil, and the water we boil, the public ups and dies.

We have swept the streets, screened fruit and meats, we have had milk pasteurized;
No bacillus thrives upon human lives which we've properly sterilized;
The insidious bug in the barber's mug we have given a rude surprise,
But what's the use?—some screw is loose—the public ups and dies.

In the days gone by no "swat the fly" was the usual summer sign;
But it somehow fell men lived as well—their lives were as yours and mine;
So something's wrong with the germ fiend's song—what it is we can't surmise;
But the cinch remains that, spite of our pains, the public ups and dies.

CHOLERA FOUND IN NAPLES.

Government Notified by Italian Foreign Office.

(The Charleston News and Courier.)

Rome, Sept. 25.—Official announcement was made to-night that one case of Asiatic cholera had been found in Naples. The foreign office has notified the respective Governments, adhering to the sanitary convention signed in Paris.

It is also announced that all who were in contact with the disease have been isolated and that other and more drastic measures are being taken to prevent its spread. The sanitary staff at Naples has been reinforced.

AN EXCELLENT CHOICE.

(Columbia Daily Record, Sept. 22, 1910.)

In his appointments Gov. Ansel has shown, throughout his two administrations, rare discrimination and sound judgment. None has been any wiser than that of Mr. J. Wright Nash to succeed the late Mr. J. P. Glenn as a member of the board of regents of the State Hospital for the Insane.

Mr. Nash is himself a man of excellent judgment; a lawyer of experience and ability, and a proved public servant. A lawyer should be a member of the board of regents, which has not had a representative of that profession among its members in recent years, and no more satisfactory selection could have been made than the appointment of Mr. Nash.

MAKES HANDSOME GIFT TO AIKEN SANITARIUM.

Mrs. T. O. Richardson Makes Donation of House and Lot Valued at $15,000.

(The Columbia State, Sept. 18, 1910.)

Aiken, Sept. 17.—Mrs. T. O. Richardson, who for many years resided in Aiken, has donated to the Aiken cottages, a local sanitarium, her house and lot on Hayne Avenue, which is valued at about $15,000. When Mrs. Richardson sold her property to Dr. T. C. Stone of this city some time ago, this property was reserved and she has now presented it to the sanitarium.

The lot measures 200 feet by 400 feet and is most desirable property.

CHILDREN'S HOSPITAL.

One to be Erected on Line of the Clinchfield Road.

(Columbia State, Sept. 11th.)

Altapass, N. C., Sept. 10.—Dr. Ross S. McElwee of Statesville, N. C., is here to select a location for a children's hospital, which he desires to be situated somewhere on the Carolina, Clinchfield & Ohio Railroad. He is head of a company of gentlemen who will finance the institution and operate it in the summer months. About 25 acres are required, which will be used for the necessary buildings, gardens and playgrounds for the children patients. The doctor says that outdoor living in the pure air and

sunlight of this section will be a large part of the treatment given anaemic, feeble children, and that he knows of no place where surroundings are more conducive to health.

The hospital is designed more especially to meet the demands of people in the lowland cities of the Carolinas, Georgia, Alabama, Mississippi and Louisiana.

WYCHE WANTS SPEAKERSHIP.

Man Who Defeated "Hub" Evans is Mailing Notice of Candidacy to All Members of House.

(Columbia State, Sept. 15th.)

Spartanburg, Sept. 14.—It was stated here to-day that Dr. C. T. Wyche of Newberry, who defeated "Hub" Evans for the legislature, will be a candidate for speaker of the House. Dr. Wyche has been a member of the House for a number of years.

Notice of his candidacy for the speakership is being mailed to all members of the House.

MEDICAL COLLEGE OPENS.

North Carolina School Has Good Attendance.

(Columbia State, Sept. 15th.)

Charlotte, Sept. 14.—The North Carolina Medical College was formally opened to-day for its 17th annual session with prospects for the most successful year's work in the life of the institution. The attendance at the opening was decidedly larger than it was last year and it is confidently expected that the enrollment this year will exceed by 10 or 15 the enrollment of last year, when it reached 110 students.

The attendance, the enthusiasm of the students and the earnestness and determination of the faculty would all indicate that the recently published criticism of the institution, following the adoption of the "Forsyth resolution," has marked much more good than harm to the college.

At the opening exercises to-day the annual address was delivered by Rev. Dr. P. R. Law, editor of The Presbyterian Standard. The feature of the exercises was an addreess by Dr. J. P. Munroe, president and founder of the college, who answered for the students the questions that have arisen since the recent attacks on the college.

"RAT-PROOFING" A CITY.

Word Coined in Connection With the Cleansing of San Francisco.

(Columbia State, Sept. 13th.)

San Francisco is being "rat-proofed." The word has become part of the San Franciscan vocabulary, like "water-proofing," and refers to a style of brick and concrete architecture that is enforced by condemnation proceedings in portions of the city, until now the centres of rat population.

Eighteen months have passed since the last capture of a rat afflicted with the bubonic plague—the "black death" of history, which fleas, borne by the rats, spread to human hosts. But the fight to exterminate the rodents goes on. According to the report of Dr. G. M. Converse of the United States public health and marine hospital service, the sewers are being poisoned and the rats are being caught in cages and snap traps at the rate of 8,600 monthly. In "Butchertown,' in the congested Japanese quarters, and in the wholesale fruit and produce section of the town, the ramshackle buildings are being rat-proofed in their basements or entirely replaced with solid structures.

By and by every American city may be rat-proofed, fly-proofed, tick-proofed and mosquito-proofed, until these death-dealing vermin are utterly destroyed.

MEDICAL COLLEGE SCHOLARSHIPS.

(Charleston News and Courier, Sept. 20th.)

Columbia, Sept. 19.—Governor Ansel has awarded scholarships from the seven Congressional districts of the State to the South Carolina Medical College for the session of 1910-1911.

The following have been awarded scholarships: First district, Henry Patrick Wagener, Charleston; 2d district, Fitzhugh Salley, Salley; 3d district, W. C. Mays, Fair Play; 4th district, S. L. Allen, Enoree; 5th district, Melvin Stover, Heath Springs; 6th district, F. L. Martin, Marion; 7th district, P. E. Watts, Columbia.

EXAMINE TEETH AND NAILS.

Landrum School Guards Health of Pupils.

(Charleston News and Courier, Oct. 1st.)

Landrum, September 30.—The public school is doing excellent work. The enrollment is already above 200, and that number is increasing daily. Acting upon the advice of the South Carolina Dental Association, the teeth and finger nails of each pupil are inspected daily. While this is out of the usual, it is believed that it will result in great good.

NEW ASYLUM SITE IN RICHLAND.

Commission Decides on 1,500 Acres Near Columbia.

Selection Made at Meeting Yesterday, but Exact Location and Price of Property will be Withheld Until After Meeting Next Friday—Races to be Segregated, Negroes to Occupy New Building.

(Charleston News and Courier, Oct. 1st.)

Columbia, Sept. 30.—The new Asylum to be erected for negroes, giving in South Carolina for the first time the segregation of the races, will be built in Richland County. To-night Dr. James W. Babcock, chairman of the Asylum commission, announced that the commission, at a lengthy session to-day, had unanimously decided to make the purchase of the new site in this County. Fifteen hundred acres, or thereabouts, will be secured, the land lying a few miles from the present site of the old Asylum. The location has not yet been made public. The preliminary arrangements looking to the purchase of the land have been made and at a meeting of the commission, to be held next Friday afternoon at 2 o'clock, the commission will complete arrangements and will announce the exact location of the land.

Unanimous on Richland Site.

Out of more than 60 sites that were offered, the Richland land was selected unanimously by the members of the commission. Dr. Babcock remarked to-night that the action of the committee throughout has been unanimous. Sites were offered from many Counties in the State and a number were included in the list of those offered in this County. No Charleston sites were offered, but Charleston men were interested in some of the sites offered.

The commission has been at work several months in the matter and have given careful thought to the work of selecting a site. When the commission met today there was a trip out into the County and more land was looked over. In addition to this new sites were offered from other parts of the State. This list had been cut down to a few sites at the last meeting.

Commission not Limited.

The commission was not limited to any particular number of acres, as has been

erroneously represented from time to time.

The resolution passed at the last session of the General Assembly says the commission shall purchase lands, but does not say how much. The selection of a site in this County will eliminate the necessity of an absolute division of the State Hospital for the Insane. There will be two asylums, it is true, the old one for the white and the new asylum for the negroes, but both will be in this County. At a further meeting the commission decided it would be impracticable to move the present Asylum and the buildings thereon are being improved and two new ones erected. This relieves for the time being the overcrowded condition of the Asylum.

Segregation at Last.

At another meeting also, the commission decided that the new site should be utilized for the negroes, so that there would be a segregation of the races. This has been one of Dr. Babcock's efforts for many years. The segregation of the whites and negroes has been aimed at for a long time. It will now be accomplished. The commission has $100,000 available under the resolution. The land, although no purchase price has yet been given out for publication, probably cost in the neighborhood of $15,000. That would leave about $85,000 for the erection of buildings. The purchase price mentioned here is only speculation, to show the amount available for the new buildings to be erected on the site.

When the commission meets next week more definite details with regard to the purchase will be given out. All members of commission were present to-day, as follows: Dr. James W. Babcock, chairman; Dr. Robert Wilson, Jr., of Charleston; Col. Leroy Springs, of Lancaster; Judge R. O. Purdy, of Sumter, and Dr. George B. Cromer, of Newberry.

THIRD DISTRICT MEDICOS MEET.

Convention at Clinton was Interesting and Instructive.

(Charleston News and Courier, Sept. 9th.)

Clinton, September 9.—The 3d district Convention of the Medical Association of South Carolina convened here last evening at the Clinton Hotel at 8:30 P. M., after being entertained by the local physicians at supper. This district consists of the Counties of Abbeville, Greenville, Laurens, Newberry and Saluda, and there were about thirty present.

The Convention was opened with a prayer by the Rev. C. L. Fowler, of the First Baptist Church of Clinton, after which the president, Dr. G. A. Neuffer, of Abbeville, made a few opening remarks, congratulating the Association upon having the largest attendance ever known, and upon the cordial reception given them by the Clinton doctors.

Then followed the reading of the minutes of the last meeting, roll call and enrollment, report of committee on by-laws, all of which were adopted. No clinical cases were presented.

Dr. Neuffer made a few remarks stressing the importance of a full and free discussion of all papers.

The following excellent papers were then read and discussed:

Brain Surgery, by Dr. W. C. Black, of Greenville.

The Uses of Apomorphia, by Dr. R. B. Epting, of Greenwood.

A description of his trip to the Convention of the American Medical Association at St. Louis, as a representative of the South Carolina Association, by Dr. E. A. Hines, of Seneca, S. C. Dr. Hines is secretary-elect of the South Carolina Medical Association, and his paper was entertaining, instructive and inspiring. Dr. Hines made an earnest appeal to the members for their assistance in helping

to increase the membership in the South Carolina Association to 1,000, stating that it is now only 740.

Retro-displacement of the Uterus and its Remedies, by Dr. Curram B. Earle, of Greenville.

Some of the Evils of Mouth-breathing, by Dr. E. W. Carpenter, of Greenville.

Arteriosclerosis and Its Treatment, by Dr. James W. Kibler, of Newberry.

A Trip to the Mayos, by Dr. G. P. Neel, of Greenwood.

The papers were very freely discussed. The Association meets quarterly, and Greenwood was selected as the next place of meeting.

The following physicians were in attendance: J. B. Hughey, of Greenwood; W. C. Black, of Greenville; W. L. Bailey, of Clinton; E. W. Carpenter, of Greenville; E. A. Hines, of Seneca; C. B. Earle, Greenville; A. J. Christopher, Laurens; J. R. Tate, Calhoun Falls; P. K. Black, Mount Carmel; E. W. Pinson, Cross Hill; Jas. M. Kibler, Newberry; Chas. E. Rogers, Gray Court; W. P. Turner, Greenwood; J. D. Austin, Clinton; J. H. Miller, Cross Hill; J. W. Young, Clinton; J. Lee Young, Clinton, M. W. Cheatham, Abbeville; Rolphe E. Hughes, Laurens; G. A. Neuffer, Abbeville; G. P. Neel, Greenwood; T. L. W. Bailey, Clinton; J. W. Davis, Clinton.

The following are the officers of the Association: G. A. Neuffer, of Abbeville, president; Rolphe E. Hughes, vice-president, Laurens; G. P. Neel, of Greenwood, secretary.

HORRY MEDICAL SOCIETY MEETS.

Interesting Paper on Hook Worm Read by Dr. F. A. Bell.

(Charleston News and Courier, Sept. 9th.)

Conway, September 9.—Quite an interesting and instructive session of the Horry Medical Society was held last evening at the office of the secretary, Dr. H. H. Burroughs, in Conway. There were thirteen physicians in attendance, and means a very largely attended meeting, for be it said to Horry's health there are very few more physicians than this in the County.

Dr. F. A. Bell, a prominent young physician, now assistant director of rural sanitation under the State board of health, who has been in Horry for several weeks, was present and read a very interesting paper on the hook worm, his paper covering the history, the area of distribution, the mode of infection, the most prominent symptoms presented and the latest methods of treatment. While here Dr. Bell has found several patients, and his paper has carried with it a discussion of the clinic and the treatment he has followed since being here. Following Dr. Bell's paper the physicians in attendance entered into a discussion of the subject.

Dr. Bell is doing a great service in the County. He is making Conway headquarters, and takes trips into the rural districts, joining the county physicians in their work. The doctor is a native of Boston, but loves the South, and says he is going to stay here. He came to this State in 1906, practicing four years in Georgetown County, where he was when given his present position.

The Horry Medical Society holds regular monthly meetings. The organization is doing a great work, having undertaken a systematic method of educating the people in the rural districts on the question of public health and how to prevent the spread of disease, and other questions necessary to the preservation of our health. Dr. A. B. Lewis, of Green Sea, is the president, and Dr. H. H. Burroughs, secretary.

SPARTANBURG DOCTOR ROBBED.

Dr. William G. Sexton Decoyed and Chloroformed—Relieved of $500.

(Charleston News and Courier, Oct. 4th.)

Spartanburg, September 14.—Decoyed to a lonely spot near Glendale, six miles

from this city, by a call for his professional services, Dr. William G. Sexton, of this city, was waylaid this morning by two white men, who overpowered him, rendered him unconscious with chloroform and robbed him of $500. According to his statement, he had intended to give the money to a building contractor in payment for repairs to his house, which was almost destroyed by fire three months ago. Dr. Sexton had a narrow escape from losing his life on that occasion.

Dr. Sexton lay unconscious for nine hours. When he recovered consciousness he called to a passing negro for assistance. He was brought to Spartanburg and taken home. He was still dazed, but managed to tell a connected story and to give a fairly good description of one of his assailants. Deputy Sheriff J. Edward Vernon and a posse at once started in pursuit.

PHYSICIAN COMMITS SUICIDE.

Dr. Herbert D. Gudger, of North Carolina, Cuts his Throat.

(Charleston News and Courier, Oct. 1st.)

New York, Oct. 4.—With his mother frantically endeavoring to restrain him, Dr. Herbert D. Gudger, a young physician from Asheville, N. C., committed suicide this afternoon by cutting his throat with a razor in a room at the Grand Union Hotel. It had been intended to place him in a sanitarium tomorrow. His health was broken by overwork.

PHYSICIAN SLAIN BY PATIENT.

Atlanta Doctor Shot and Killed in his Office.

(Charleston News and Courier, Sept. 21st.)

Atlanta, Ga., September 20.—Armed with a revolver, a pair of brass knucks and an open knife, and awaiting his turn in the office of Dr. J. R. Sewell, 106 1-2 Whitehall Street, W. M. Cox, aged 36, of Austell, Ga., shortly after noon today, shot and instantly killed the physician just as the latter was emerging from his operating room. Cox then turned the pistol on himself and pulled the trigger. He is now at the Grady Hospital with a fractured skull.

MEDICAL COLLEGE OPENS DOORS.

Institution will To-day Begin its Eighty-second Annual Session.

(Charleston News and Courier, Oct. 3d.)

The Medical College of South Carolina will open to-day, beginning its eighty-second annual session. The College was to have opened Saturday, but on account of the death of Dr. J. Somers Buist the opening was postponed. The exercises will begin to-day at noon. Besides the welcoming address by the dean of the faculty, the Hon. James Simons, a member of the board of trustees of the institution, will make an address.

The standard of the College has been raised considerably this year, but notwithstanding, it is believed that the enrollment will be the largest in the history of the institution. On October 8 an examination will be held for applicants who do not hold diplomas or certificates from high schools. Last year the enrollment was 290, and it is expected that there will be 300 men present to-day to matriculate.

One of the new features of this year's work is the addition of a very attractive course of lectures by Dr. Baylis H. Earle, of the United States marine service. His special subjects will be sanitation and tropical diseases. During the vacation the College building has been completely renovated and many improvements made. Provision has been made for a large increase in clinical work this year. When the young men enter the College building to-day they will find quite a number of changes in the way of decided improvements.

BOOK REVIEWS.

A MANUAL OF HYGIENE AND SANITATION. By Seneca Egbert, A. M., M. D. Professor of Hygiene and Dean of The Medico-Chirurgical College of Philadelphia; member of the Academy of Natural Sciences of Philadelphia; member of the American Medical Association, etc., etc., Fifth edition, enlarged and thoroughly revised. Illustrated with 97 engravings. Lea & Febiger, Philadelphia and New York, 1910.

With the constant increase of knowledge concerning the transmission of disease and the necessity for the observing of preventive measures, constant revisions of the text books on hygiene and sanitation are necessary. Egbert's latest edition is one of the most concise works which we have seen dealing with the subject. Dr. Egbert has not been sleeping since the latest edition of his work, and has utilized the most recent discoveries and the most recent reports in the compilation of his work. It is a valuable addition to any practitioner's library provided he reads it and observes its dicta, and any practitioner who does not read and observe such dicta deserves to have his license revoked. For instance—there is more disease spread through carelessness, especially in the disposition of excreta, than by any one other means probably—though the vast majority of physicians are totally inattentive to the sewerage arrangements of their patients' houses and are usually too ignorant concerning such matters to give intelligent advice should it be asked. The chapter on the removal and disposition of sewerage alone makes the book worth purchase.

The writer touches rather too briefly, we think, on some important subjects; but probably is wise in so doing as otherwise he would be making his book less likely to be read.

In these days the physician is becoming more and more the sanitarian instead of the curist and it is necessary that he should keep in touch with the advance in sanitary science. Therefore we recommend the reading of this book.

SYMPTOMATIC AND REGIONAL THERAPEUTICS. By George Howard Hoxie, A. M. M. D., Professor of Internal Medicine and Dean of The Cinical Department in the School of Medicine of the University of Kansas, etc., etc. With fifty-eight illustrations in text. D. Appleton & Company, New York and London, 1910.

The idea of having a book devoted entirely to regional and symptomatic therapeutics is somewhat original. Many of the older works on materia medica and therapeutics contain a section on therapeutics alone, but this is a volume devoted entirely to therapeutics with little of materia medica thrown in. It is rather interesting reading and at the same time has the virtue of being up-to-date. It is certainly a most handy book to have on the general practitioners office desk—one which will save him many moments worry over what he shall do. The book seems to strike the happy medium between the verbose and the sparse types and should meet with a ready demand.

Part III, which is the small portion of the book devoted to materia medica is exceedingly concise. The book is well printed with fairly large type and is easily read.

ANATOMY, DESCRIPTIVE AND APPLIED. By Henry Gray, F. R. S., late lecturer on Anatomy at St. George's Hospital, London. New (18th) edition, thoroughly revised, by Edward Anthony Spitzka, M. D., Professor of Anatomy in the Jefferson Medical College of Philadelphia. Imperial octavo, 1496 pages, with 1208 large and elaborate engravings. Price, with illustrations in colors, cloth, $6.00 net; leather, $7.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1910.

The subject of human anatomy is as old as the race, but will always be as in-

teresting as any story which we might read as long as the race shall last.

Gray's description of human anatomy has become a classic among such works. The minuteness and vividness of his descriptions have never been surpassed by any author, nor equalled save in rare instances. Edition after edition of this massive work has been run through with ever a demand for new editions.

While there is little that is new that can be added to Gray's original work, yet a revision has been made in the latest edition which has added materially to its value. This revision is chiefly in the section on surgical or, as the reviser expresses it, "APPLIED ANATOMY" and has brought the subject of applied anatomy up to the most recent times.

Owing to the rapid advances in surgery many anatomical points heretofore ignored, forgotten, or unknown, have been brought into prominence. These points Professor Spitzka has placed clearly so that he who runs may read.

The mere fact that an authority so well known as Professor Spitzka should have revised an anatomy would of itself give value to the revision, and when the book so revised was one of such great value as is Gray's Anatomy, double value is added to the work. The book is well bound, well printed and well worth owning.

THE PRACTICE OF MEDICINE. A Guide to the Nature, Discrimination and Management of Disease. By A. O. J. Kelly, M. D., Assistant Professor of Medicine, University of Pennsylvania; Professor of Medicine, University of Vermont. Octavo, 949 pages, illustrated. Cloth, $4.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1910.

This volume is somewhat of an innovation in certain ways. The divisions of the various diseases into certain definite groups varies somewhat from many of the older writers, but Kelly has included also numerous diseases which were overlooked formerly by most writers or else were dismissed with a word. This is especially true of a group of so-called tropical diseases. The division of infectious diseases is introduced by a most valuable chapter which gives concisely, and at the same time clearly, the principal facts known to date about these diseases as well as the most recent theories both as to causation and as to treatment. The diseases themselves are perforce treated rather briefly, but this must be so when so vast a subject is condensed into one volume.

We do not think Dr. Kelly's description of the symptomatology of the various disorders is as complete as might be. However, this is not altogether a disadvantage as it enables both the student and the practitioner to seize a bird's-eye-view of the subject with little exertion to himself. Besides, with his introduction to the infectious diseases, he has outlined many of the principal facts connected with the etiology, symptomatology and treatment in his preliminary chapter and thus saved himself much repetition in the descriptions of the various diseases.

Like most recent writers, Dr. Kelly does not lay much stress on the treatment of disease by drugs, although he does recommend the use of drugs in certain cases as a matter of course. The only real adverse criticism which we can make of the work would be that the descriptions are too concise. As a handy up-to-date reference book on general medicine, we can recommend it heartily.

A MANUAL OF OBSTETRICS. By A. F. A. King, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the George Washington University, Washington, D. C., and in the Medical Department of the University of Vermont, etc. Eleventh edition, enlarged and thoroughly revised. 12mo., 713 pages, with 341 Illustrations and three-colored plates. Cloth, $2.75, net. Lea & Febiger, Philadelphia and New York, 1910.

This book fulfills its object as stated in the preface: "The chief purpose of this book is to present, in an easily intelligible form, such an outline of the rudiments and essentials of obstetrics as may constitute a good groundwork for the student at the beginning of his studies, and one by which it is hoped he will be the better prepared to understand and assimilate the extensive knowledge and classical description contained in larger and more elaborate text books."

The eleventh edition is much larger than the earlier editions, and several additions have been made in the present revision. The book is elementary, as the author claims it to be,

and is useful as a handy reference book of obstetrics but does not go fully into many of the more intricate questions involved in obstetrical work. For instance, the section on hyperemesis of pregnancy devotes merely a few lines to the theory of the toxic origin of this condition with its consequent degenerative changes in the various organs, especially in the liver. This brevity while making the book convenient for handy use leads unfortunately to a wrong conception of the importance of these matters. However, the object of the author is admirably carried out in that he does not attempt to make a complete study of obstetrical problems, but only to give an outline of these in order to point the way for further study should the student desire it.

To any one who has not a copy of the book it certainly is worth the price; but for one who has one of the recent editions the changes and revisions in the present volume would hardly be sufficient to warrant a reinvestment.

This book is profusely illustrated and the illustrations are such as add greatly to the value of the context.

THE MANUFACTURE OF ANTITOXIN.

In the treatment of diptheria the physician of to-day uses antitoxine as a matter of course. It is his first expedient and his last resort. He believes implicitly in its efficacy. But does he understand and appreciate all that is involved in the production of that antitoxin—the scientific knowledge, the skill, the caution, the minutiae of detail? This thought is forced upon the writer through the perusal of a recent publication of Parke, Davis & Co., which deals in part with the subject of antitoxin manufacture. Here is a specimen chapter:

"In the selection of the horses which are to act as the living laboratories for the production of the antitoxin, we apply not commercial or academic knowledge merely, but, what is more to the point, veterinary skill. The animals must be vigorous and healthy. They are carefully examined, their temperature noted for several days, and the presence of glanders excluded by the delicate mallein test. It is the blood-serum of these animals that is to be injected into the patient later on, and no precaution can be regarded as extreme which contributes the slightest positive assurance of its purity.

"Not only must the horses be in good general condition when inoculated; they must be kept so. They are fed, stalled, groomed and exercised for no other purpose than to maintain to the full their self-protective, antitoxin-producing powers. Thirty miles removed from the noise, smoke and dust of the city is our stock farm equipped with model stables and supervised by expert veterinarians. Here, at Parkedale, on more than three hundred acres of sunny slopes, at an altitude of six hundred feet above the level of the Great Lakes, live the horses which we employ in serum-production. Amid these favorable surroundings they maintain the physical condition so essential to satisfactory service as serum-producers.

"These are preliminary considerations. Young, healthy, well-kept horses, indispensable as they are, would be of little use in the elaboration of a reliable antitoxin unless the work of injecting them with toxin were conducted accurately, asceptically, systematically and throughout a period long enough to allow physiological reaction up to the limit of attainable immunization. We have horses enough, so that there is no occasion to be in a hurry with any of them; the exact length of time required for complete reaction is determined in each individual instance by carefully scheduled observations.

"It goes without saying that in the preparation of the toxin and its injection into the horses, as well as in obtaining the blood serum, the most rigid bacteriological technique is maintained. The methods we employ agree substantially with those of Roux, Aronson and Behring, and are from first to last in charge of experts. The varying susceptibility of different animals, whether guinea pigs or horses, to the diphtheria poison; the more or less rapid physiological reaction; the variation in strength of the anti-toxic serum from different horses; the absolute purity of the finished product—these are all important and delicate questions demanding for their determination a high degree of skill and scientific accuracy of observation. These qualifications in our judgment outrank all other considerations in the work of producing a reliable antidiphtheric serum."

The foregoing has reference to but a single step in the process of serum production, and affords but a hint of the safeguards with which Antidiphtheric Serum (P. D. & Co.) is hedged about at every stage of its manufacture—conditions which enable the company to guarantee the purity and potency of its antitoxin.

HOME TREATMENT OF TUBERCULOSIS.

Not every tubercular patient is able to seek the climate best suited to his condition, and it becomes necessary for him to make the best of those curative means at his command. After the physician has outlined to him a well ordered mode of living, there then arises the question of an agent that will aid in tissue reconstruction and resistance to the disease process. In choosing his therapeutic means of combatting tuberculosis, the physician takes into consideration two features—the value of the remedy chosen for the purpose and the patient's ability to continue it for a sufficient period to derive results. Quite naturally, he thinks of cod liver oil. But generally cod liver oil products quickly prove distressing to the gastric apparatus. A striking exception is the *Cord. Ext. Ol. Morrhuae Comp. (Hagee)*. Although it is just as potent a tissue builder as the crude product, it possesses added advantages in that it is palatable and this is a most important feature. It agrees with weak stomachs in a surprising manner and may be continued indefinitely without giving rise to gastric unrest.

MOIST HEAT.

Thermotherapy in inflammatory conditions seems to prove most effective when applied in the form of moist heat.

The relaxation of pressure of infiltrated and swollen tissues upon nerve endings, as experienced by the relief of pain, specifically proves this.

The advantages of moist heat where indicated is generally acknowledged. The method of its application from professional preferment seems to be in the form of Antiphlogistine. By this method, a high temperature can be maintained in contact with the affected part for hours without exposure to the patient for redressing.

The superior advantages of Antiphlogistine over other forms of moist dressings, such as poultices, hot packs, etc., are that it is easily applied, retains its heat for hours, is antiseptic in action, and above all produces satisfactory therapeutic results.

Clinical experience with Hagee's Cordial of the Extract of Cod Liver Oil Compound justifies the assertion that its therapeutic indications are precisely those which belong to cod liver oil in its natural condition.

The fatty element (and this alone) is indeed completely eliminated, and while the nutritional value of that factor is undoubted, as is the case with most of the other varieties of animal and vegetable oils, it must not be forgotten that oil in any form will not be tolerated by the gastric mucous membrane in many of the cases for which cod liver oil is indicated. Hagee's Cordial is free from the taste and smell of oil, and is acceptable to the most fastidious taste.

When the physician finds it necessary, in disorders of digestion, to promote secretory activity by different remedies, this object can most certainly and completely be achieved by endeavoring to restore the appetite.

—*Pavlow, The Work of the Digestive Glands.*

Colden's Liquid Beef Tonic

Activates the Gustatory Organs
Arouses Appetite
Stimulates the Gastric Glands
Promotes Digestive Secretions

Indicated in impaired appetite, feebleness of old age, convalescence, gastro-intestinal atony, and all disorders of digestion and of nutrition in which the secretory activity of the digestive glands is subnormal. In cases complicated with anaemia, Colden's Liquid Beef Tonic with Iron is indicated.

Sold by druggists

Sample with literature mailed *gratis* to any physician on request

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The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. J. C. SOSNOWSKI, Editor.

VOL. VI. NOVEMBER, 1910. No. 11

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

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JOURNAL S. C., MED. ASS'N., CHARLESTON, S. C.

THE PSYCHOLOGY OF PELLAGRA.*

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Recognizing our inexperience in dealing with many phases of the pellagra problem, we must admit for some time to come our dependence upon European writers for authoritative descriptions of the mysterious malady. Hence I shall, for the second section of this paper, confine myself almost entirely, to reviewing and quoting from articles and monographs upon the mental symptoms of the disease that have been written by Italian, German, French, and English observers

In the admirable description of pellagra given by Copland (9), it is stated that: "The nervous system presents remarkable disturbance, and the manifestations of the mind are more or less disordered. The pellagrosi complain of a sense of heat in the head and spinal cord; of tingling and darting pains in the course of the nervous system, of heat in the limbs, palms of the hands and particularly in the soles of the feet; of great weakness of the limbs, with trembling when attempting to stand and sometimes of contractions of the lower limbs. Their looks become sombre and melancholy. Ennui, depression of spirits, and mental imbecility increase with the progress of the malady. Dr. Holland states that the pellagrosi afford a melancholy spectacle of physical and moral suffering at this period. They seem under the in-

*The second part of a paper entitled "The Prevalence and Psychology of Pellagra" and read before the Am. Med. Psycholog. Assoc. at Washington, D. C., May 5, 1910. The first part appeared in this Journal Sept. 1910.

fluence of an invincible despondency, they seek to be alone, scarcely answering questions put to them; and often shed tears without obvious cause . Their faculties and senses are impaired and the disease when it does not carry them off from exhaustion of the vital powers, generally leaves them insensible idiots, or produces attacks of mania, soon passing into utter imbecility or idiocy."

Hack Tuke studied pellagra in Italian asylums in 1865. He says (10): "The patients were in an advanced stage of the disease, and were all more or less emaciated, sallow, anemic, and presenting a miserable dry wrinkled skin. They were obtuse and inert, their mental state being that of dementia, quiet, chronic mania; or, in some instances, chronic melancholia. None of them were in an acute maniacal condition."

The views of Salerio (11), director of the asylum of San Servolo, Venice, upon the mental condition of his patients, may thus be summarized: They are generally frightened; think they are persecuted, or possessed with the devil, suspicious, refuse food and medicine, and have exalted religious notions. Suicidal tendencies may be present. Homesickness is common and severe. Finally, they are liable to lapse into dementia, paralysis, or tubercular diseases.

Bucknill and Tuke (12) quote also from an early work of Lombroso, who thought that the one characteristic of pellagrins, sane or insane, was a greater moral impressionability. A slight insult, the threatening of some trival danger completely carries them away. If pellagrous insanity assumes a type, it approaches rather that of chronic mania and dementia than that of monomania. A real or apparent stupidity, an obstinate mutism, is tolerably common, which Lombroso, ingeniously terms "psychical catalepsy." But, as a rule, their insanity is of a misty, ill defined, contradictory character, like that produced by old age, or by anemia, and differing in this point from general paralysis.

Morselli (13) gives four forms of pellagrous insanity, viz., supra-acute pellagra (typhoid pellagra), pellagrous melancholia, pellagrous dementia, and pellagrous pseudo-general paralysis.

Babes & Sion (14) say in part:

"Usually after several years of somatic pellagra, psychical symptoms come into prominence. At first the patients experience mental weakness. The peculiar pellagrous lunacy is preceded by spasmodic, then tonic, cramps and generally bodily weakness, and advances to a true pellagrous paralysis. The cramps of feet, hands and calf muscles are sometimes so violent that they may result in epilepsy, contractions and swooning. So-called pellagrous epilepsy occurs as the result of spinal pain, the patient being drawn backwards. An important condition called pellagrous tetanus has been described by Strambio, opisthotonos, being a common characteristic symptom. Sometimes the patients are drawn forward and fall to the ground. Choreiform movements especially in the head, are observed. Generally from the incipiency of the disease, depression and weakness of the memory are noted. Rousel asserts that in this stage deliria do not appear, but that they come on in the spring of the second or third year. The sadness may advance to mutism and refusal of food, these conditions being often interrupted by lachrymose or maniacal or suicidal episodes. An acute attack leaves the patient exhausted, depressed and hypochrondriacal. Such attacks recur annualy at about the same time, the intellect weakens, and gradually dementia develops.

"Pellagrous melancholia shows various stages: at first, there are psychic impediments followed by apathy or stupor. Delusions of sin, of persecution, etc., appear. Mania is rare, but catalepsy sometimes occurs.

"When paralysis supervenes, euphoria

appears, presenting a disease-complex like general paralysis, but even in advanced stages of the disease remissions may occur."

G. Antonini (15) writes:

"Already in the first stages of pellagra there appears a decided modification in the mental faculties; there is a great impressionability, a greater psychical excitability, a slight disappointment depresses greatly the tone of feelings, or produces excessive reactions (from want of initial inhibitory powers). In the progress of the disease, we can have true amentia,* states of mental confusion common to all psychoses arising from exhaustion. This state can show suddenly an aggravation of symptoms and lead to death with a syndrome of acute delirum (typhoid pellagra) and yet it can also present in certain cases a true progressive paralysis of pellagra.

"But a frequent symptom is the obstinate refusal to take food, such as aggravates painfully the already sad picture of the pellagrin."

Griesinger notes (16) that pellagrous insanity, according to Clerici (1855) consists chiefly in a vague, incoherent delirium, accompanied by stupor, loss of memory, and by loquacity without special disorder of intelligence, or violent excitement; the melancholic state, which predominates for a long time, always passes gradually into a state of torpor of all the mental powers, with muscular weakness, which greatly resembles general paralysis.

Mongeri (17) concluded that the pellagrous psychoses begin, ordinarily, with a period of mental depression accompanied by hypochondriac ideas. Following great mental prostration, the ideas become confused. Later melancholia appears acompanied by hallucinations of hearing, with illusions of general sensibility. Following this condition are delusions of persecution with a tendency to drowning (the hydromania of Strambic.) Again developing persecutory paranoia, pellagrins commit crimes of every sort, homicides, infanticide, incendiarism, etc.) Dementia is the common termination.

We will next quote from Bianchi, (18) one of the leading modern Italian writers on mental diseases.

"The nervous phenomena dominate the scene in pellagra. We may classify the different varieties in two groups: The chronic and the acute. The first is characterized by general depression, melancholia, confusion, slow dementia, paresthesias and ataxic gait. Contractures and subsulti are absent, although in most instances, the reflexes are exaggerated. In the acute form, we have elevation of temperature 39 degrees to 41 degrees C.; intense neuromuscular excitement, subsulti, contractures, muscular rigidity exaggerated reflexes and confusion with phases of exaltation. There are numerous intermediate forms in which we observe a great variety of psychical phenomena, and also alternations of excitement and depression. Phases of remission and of apparent recovery are observed, especially at certain seasons."

Regis (19) announces, that, "It is recognized that the most common form of psychosis in pellagra is mental confusion with melancholy, or dreamy delirium. This occurs more or less marked in most cases. It is manifested by an inertia, a passivity, an indifference, a considerable torpor; by insomnia, hallucinations often terrifying, both of sight and hearing; by delirious conceptions, with fixed ideas of hopelessness, of damnation, of fear, anxiety, persecution, poisoning, of possession of devils and witches, of refusal of food, and so marked a tendency to suicide, and to suicide by drowning that Strombio gave it the name of hydromania. This melancholy depression, which can reach, in certain cases, even to stupor, is always based upon

*The Continental writers use "amentia" in the sense of an acute confusional insanity.

a foundation of obtusion, of intellectual hebetude, and of considerable general debility, which becomes permanent and terminates by degrees in dementia, in proportion as the pellagrous cachexia makes new progress. It is accompanied sometimes by a polyneuritis. The mental confusion of pellagrins can, in place of changing directly into dementia, turn to a chronic mental confusion.

"One may also observe in pellagra, as in every chronic grave intoxication, a morbid state resembling general paralysis, (pellagrous pseudo-general paralysis). This occurs especially in the cases where, instead of habitual melancholy ideas, the patients present ideas of satisfaction and of wealth."

Procopiu (20) discusses the subject at length, saying in part: "We have seen that the character and intelligence of pellagrins change. They become sad, apathetic, silent: in the more advanced stage they are melancholy, and fall sometimes into absolute mutism, or respond with difficulty, and have the air of not understanding what is said to them.

"Sometimes this melancholy is accompanied with stupor, and leads the poor pellagrins into dementia.

"It is not rare in this condition, that an attack of acute mania breaks out. At another time, the attack of mania breaks forth suddenly without apparent cause, or under the influence of a sunstroke, a quarrel, a disappointment, etc.

"Sometimes it is in the Spring that the excitement, as the other symptoms of pellagra, makes its appearance, but generally it is later than the others, and bursts forth at the end of the season, or even during the summer.

"Pellagrous insanity has been divided into acute and chronic forms.

"The acute form is more frequent when the pellagra is associated with alcoholism, then this form presents the characters of delirium tremens. The acute form often manifests itself in the course of the chronic form, but it can also begin in the state of apparent health.

"The acute insanity in particular which bursts out suddenly while the patient is in a state of mental health, is easy enough to cure. But when the disease is advanced, and the lesions of the nerve centers are profound, cure is difficult, sometimes impossible, especially in the case of dementia. When even a sensible amelioration is obtained, the intellectual condition of the patient remains always in a marked degree of inferiority."

From the more recent treatise of Tanzi (21) we learn that "Pellagra is almost always accompanied by psychical disturbances, which often have the character of true mental diseases.

"A pellagrous melancholia and a pellagrous mania have been described. The characteristic psychosis of pellagra is, however, amentia, which manifests itself acutely in loss of sense of place, loss of memory, confusion, hallucinations, and paresthesias, from which there arise morbid impulses and delusions. Pellagrous amentia often assumes a depressive form, which simulates melancholia; and in some cases, either from time to time, or throughout the whole course of the psychosis, it is accompanied by exaltation, which gives it some resemblance to mania.

"The first attack of amentia occurs after pellagra has existed for some years, and has already given rise to erythema, and diarrhoea, and has remitted from time to time. In other words, the pellagrous lunatic is, as a rule, a chronic sufferer from pellagra. But whilst the pellagra, although chronic, continues to run an intermittent course, the mental disturbances associated with it have the characteristics of an acute insanity, which corresponds exactly to amentia—i. e., to the most typical of the acute insani-

ties, both as regards the symptoms and course.

"The insanity of pellagra is thus something different from common melancholia, or from ordinary mania. It is also something more than simple amentia. We may regard it as the combination of two distinct clinical pictures, namely, that of amentia in the first attacks, and that of dementia in the later and progressive phase, marked by chronic and incurable cachexia. It is an intermittent and progressive amentia, which, if not cured or if not early fatal, terminates in dementia."

What is the relationship of pellagra to progressive paralysis? Baillrager asserts that pellagra may be followed not only by mania and melancholia, but also by progressive paralysis. Verga opposes the last opinion, while Regis and Pianetta affirm it. (Gregor)

Gregor (22) in 1907, recognizing that exhaustive clinical observations on the so-called mental disturbances of pellagra were wanting, made careful analyses of the psychic condition observed in 72 cases, who had been admitted to the Bukowina State Asylum from March, 1904, to September, 1905. In 1902, he says Finzi published his "Psicosi Pellagrose," coming to the conclusion that this mental disturbance is essentially an insanity, and that the psychosis of pellagra is amentia. This view, which agrees with that of Tanzi was combatted by Vedrani, who maintains that the psychosis of pellagra takes usually its course without serious disturbances of orientation and reason. On the other hand, Warnock (23) claims that symptoms of melancholia are the usual accompaniments of the mental disturbances in pellagra, and thus approaches the views of the older writers, who assume especially close relations between pellagra and melancholia. Thus Aubert tried to prove in 1858 that an attack of pellagra might convert an heterogenous disease into melancholia. This view was vigorously maintained by Aubert against Baillarger and others, who held that the psychoses of pellagra are polymorphic, including meningitis, mania, melancholia, etc. and even general paralysis. This view is still maintained notably by Zletarovic, who has observed the development on the basis of nutritive disturbances caused by pellagra of melancholia and mental weakness to complete stupor and dementia, but he never observed mania. Even Lombroso and Tuczek, says Gregor, give only pictures of psychical conditions. Gregor also considers the studies of pellagrous insanity by Finzi and Vedrani as inadequate. But granting the absence of a characteristic symptom-complex, he says that we must still search for characteristic peculiarities, since psychoses, which are in themselves not specific, may assume certain symptoms, which are to be considered with regard to their etiology.

Gregor also includes in his study whether the relationship between pellagra and the psychoses was accidental or causal. It will thus appear that he attempts to reach a much broader and deeper conception of the neuroses and psychoses of pellagra. He divided his 72 cases into seven groups: (1) Neurasthenia, (2) Acute Stuporous Dementia, (3) Amentia (Acute Confusional Insanity) (4), Delirium Acutum, (5) Katatonia, (6) Anxiety Psychosis, and (7) Manic-Depressive Insanity.*

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*In Stoddart's recent work, (24) these varieties of exhaustion psychoses are recognized:

1. The depressive form (associated with motor restlessness).
2. The excited form (Exaltation always with motor excitement).
3. The Stuporose from. (The patients are quiet and rigid, the rigidity affecting the trunk and limbs, and they have terrifying hallucinations, and consequently are in a state of extreme depression).
4. A form of "collapse delirium" as recognized by Kraepelin.
5. The katatonic form of dementia precox.
6. There is also an intermittent form of psychosis tending to dementia.

Gregor analyses most of his cases at length, finally summarizing the symptoms he had observed.

I. NEURASTHENIA. (SEVEN CASES).

The symptoms of Gregor's first group in their details are not specific of pellagra, but offer in their totality a characteristic disease picture.

The symptoms are subjective and include headache, pain in the gastric region, vertigo, paresthesias, lassitude, depression, a sense of unrest and anxiety, which may be raised to a phobia, as well as ill-defined apprehensions. There is also a sense of bodily and mental incapacity, and of illness. Their conduct is normal, and the intellect may be unimpaired, but they are incapable of mental and physical exertion. The process of association is distinctly disturbed, the simplest question often being answered only after prolonged hesitation. With depression of spirits, hypochondriac notions may develop from a consciousness of being pellagrous, or from experience in former illnesses. In some cases there is a slight motor unrest, and a desire to move about, but as a rule patients of this group labor under motor impediment, and sink finally into a condition of apathy and resigned inactivity. Gregor admits that these symptoms are not specific of pellagra. But he suggests that, if these symptoms have lasted for several years, the suspicion of pellagra as a causative factor, should be aroused in the physician's mind, even without the presence of the somatic stigmata of the disease. He also observes that the first attack of pellagra is more likely to be accompanied by neurasthenia and that this condition commonly preceded the development of the other pellagrous psychoses.

II. ACUTE (STUPOROUS) DEMENTIA. (TEN CASES).

The milder cases of this group differ from the preceding group only in degree. The symptoms merely suggested in the former group exist here in full force. The cases of this group are characterized by a distinctly marked stupor, tending to remissions, by deep mental depression, a vivid sense of insufficiency and peculiar subjective troubles. The dependence upon pellagra intoxication can be established by the close connection of the psychic disease-picture with the somatic symptoms of pellagra. The mental symptoms improve with the bodily. The external appearances, the depressed mental condition, the tendency to suicide, etc., explain the fact that such cases are frequently considered melancholia. Finzi contradicts this view, and places these cases under amentia. Some of Tanzi's and Vedrani's cases also come under this group.

The patients give the impression of being ill, as they lie still and apathetic in bed for weeks, and answer repeated questions only after a painful effort, or not at all. Requests of the simplest nature are carried out only with hesitation and effort, and often the action once begun is interrupted in its first phase, or the request is forgotten. Mostly we are assured that the patients are well oriented, and often we see after the hesitation ceases, that the psychic activity is revived for a short time, but sometimes in the height of the disease orientation may also be disturbed. Illusions appear, the patients show a sense of insufficiency, and sometimes also a hypochondriacal sense of sickness, and a consciousness of their psychic impediments.

In many cases in which the stupor developed gradually, a disturbance of psycho-motor activity was observed without vivid mental disturbances. On the other hand, some cases, recognizing their incapacity for practical life, voluntarily commited themselves to the asylum. Most cases showed a gradual development of an affectless stupor,

with a final return to their former mental condition. Rarely psychic impediments develop in a relatively short time. The sense of insufficiency may assume a distinctly melancholic coloring, with suicidal tendencies. Again severe cases may assume temporarily katatonic symptoms of posture and motion stereotypies.

With this group, memory disturbances were especially well marked, as Tanzi has emphasized, but weakness of memory is not a characteristic of acute pellagrous dementia. Upon convalescence memory returns easily, so that the apparent memory disturbance is due rather to the general difficulty of performing psychical processes than to weakness.

With the relief of the somatic symptoms of acute pellagra, the mental symptoms also improve. Besides the connection between pellagra and nervous disturbances is evident, and different mental symptoms may complicate the picture. It would appear that melancholia is the typical mental disturbance of pellagra. Tanzi believes that we should call such cases amentia. and consider them slight forms of this psychosis. It is in this group that Tanzi would place the typical cases of pellagrous insanity. Stupor seems to promise a long duration, and an unfavorable prognosis. Favorable cases lasted from one to six months.

III. AMENTIA (ACUTE CONFUSIONAL INSANITY). (THIRTY-TWO CASES).

These cases were long continued with a tendency to remissions and intermissions. After a prolonged period, which shows essentially the symptoms of the first group, appear usually terrifying hallucinations, accompanied by violent motor excitement. The delirium was frequently followed by stupor, or existing stupor was interrupted by delirium. The patients see the house or village burning, enemies coming, wild animals attacking them, the devil appears, or machines cut off their heads. More rarely, they have quiet dreamy states, the heavens open and the Lord appears, bishops, priests, figures, etc. pass by. In imagination they return to the scenes of their daily life. Again, they run away to escape the flames, or to defend themselves against persecution Here we have phenomena of motion in connection with hallucinations. If secluded, they move about, are noisy and knock upon the door. The duration of this excitement varies from a few hours to several days. These episodes are followed more or less by long intervals in which the patients are quiet in mind and body. They may be stuporous, but usually show only slight disturbance of orientation. Later they pass into a delirium like that of meningitis or typhoid. If diarrhea be present, the complex of typhoid pellagra is recognized. This may develop in a chronic case, or be an acute process. While in rare cases the bodily and mental symptoms may improve, death usually follows this typhoid condition. Hallucinosis seems to offer for the first attack a decidedly favorable prognosis.

Dementia does not always ensue upon a severe initial attack, but develops in chronic cases of either bodily or psychic pellagra. The development of katatonic symptoms, which may appear, especially in youthful cases, renders the diagnosis difficult.

IV. ACUTE DELIRIUM. (TWO CASES).

The cases of this group are distinguished from those of the third group by the intensity of the disease symptoms, hallucinations, motor excitation, and shorter course ending in death. For this reason, the conception as acute delirium seems justified.

The symptoms of this condition may occur without the bodily signs

of pellagra. But they usually occur synchronously. Absence of a rise of temperature has been noted by both Italian and German observers.

Groups II., III., and IV. show a great similarity with the mental symptoms of acute infectious diseases. They might, therefore, be classified under the infective-exhaustive psychoses.

V. KATATONIA. (TEN CASES).

The katatonic condition occurs with acute somatic pellagra. Here, considering the concurrence of acute somatic and psychic pellagra, we must assume a pellagrous intoxication as the causative factor, as in pellagrous neurasthenia. Many patients show consciousness of their disease. Hallucinations may precede this condition. Excitment, stereotypy, wild jactitation and verbigeration are common. The katatonic cases pass rapidly into dementia.

Of the cases of the fifth group, the majority belong to the katatonia subdivision from the symptoms, course and termination. In three cases, (females) excitation occurred, ending with stereotypy, jactitation and verbigeration. The patients did not show marked affects. In one case, hallucinations preceded the condition. In all three cases, the transition into dementia was rapid, in which posture and motion stereotypies, impulsive actions and talkativeness were observed. In one case, these symptoms were followed by a permanent negative phase. In another case, besides many postures and motion stereotypies, an interchange of negativism and *flexibilitas cerea* was observed. In one case, the katatonic symptoms were marked from the beginning. A male case showed, on admission to the hospital, katatonic excitation, and after a few days a remission followed by another katatonic phase.

Six of these cases ended in dementia more or less rapidly, although remissions may occur.

VI. ANXIETY PSYCHOSIS. (THREE CASES).

The violent, fluctuating anxiety affect, the motor unrest, the anxiety ideas, and the "phonemes" completing them, determined from the first the diagnosis of an anxiety psychosis. It is true, this disease picture is complicated by extraneous features. The patients show a marked sense of insufficiency, appear slightly stuporous in the intervals between attacks and resemble cases of groups II, and III. Later after the anxiety attacks have disappeared, the mental weakness increases, the second phase gradually lessens as it does in patients of the groups mentioned. In the second case, the psycho-motor weakness changed by turns with violent anxiety affects and vivid motor unrest. Temporary ideas of persecution, and of sin, and later of stupor were also observed. The third case was typical depressive melancholia.

VII. MANIC-DEPRESSIVE INSANITY. (TWO CASES).

Of the two cases, one showed the condition of mania arising from subjective pellagra troubles. In the other, mania was followed by a distinct stupor.

SPINAL DISTURBANCES.

Gregor verifies Tonnini's observations upon the spinal symptoms of pellagrins. These are: Increase of the tendon reflexes, increase of mechanical muscular excitement, tremor of the fingers, rigidities and spasms of the leg muscles, spastic gait, diminution of the tactile, thermal, faradocutaneous sensibility; paresthesias, ataxia of lower limbs and in rare cases, of the upper extremities; and Romberg's symptom. Also, muscular spasms; tonic spasms being present

in patients in the terminal stage of pellagra, but clonic spasms are also observed, and these without the symptoms of typhoid pellagra. Paresis of the lower facial nerve was also noted.

DEMENTIA.

The dementia following pellagra shows different forms. One form develops an almost complete disappearance of mental activity, which justifies the name "paralytic." But a milder degree of dementia characterizes the larger number of cases. They are oriented, usually well-behaved, but dull and show a lack of self-restraint, with a tendency to break out into violent passion and impulsive actions.

A simultaneously existing alcoholism has a modifying influence upon the disease picture. Furthermore, in many individuals, the pellagrous mental disturbance does not appear until old age, and brings about a precocious senile dementia.

There is a distinct pellagrous dementia, like paresis, marked with somatic changes. An affirmative answer is given to the question: Are there diseases, pictures of dementia, whose anatomical basis is an injury to the brain by the toxines of pellagra?

TERMINATION.

Of 42 non-fatal cases, 21 were first attacks. Of these 17 recovered and four became demented. The others (21) had already passed through former psychoses. Of these 7 were cured and 14 became demented. These figures prove how unfavorable for complete cure the pellagrous psychoses are.

Of the 72 cases, Gregor classified under amentia group 32, the dementia and katatonia 10 each; neurasthenic 7, anxiety psychosis 3, manic-depressive and acute delirium 2 each. The other cases making up the total were excluded for alcoholism, etc. These figures show that not a sufficient number has been studied for final conclusions. The further studies and reports promised by Gregor will be awaited with interest.

GREGOR'S GENERAL SUMMARY.

In pellagra there occur mental disturbances, which belong to different forms of psychoses. The first three groups must be considered as pellagrous from their development, symptomatology and course, being caused by the pellagrous intoxication of the central nervous system. The assumption of a pellagrous dementia is justified; it can be delimited in the terminal stage from dementia paralytica, which is alone to be considered differentially. Weakness of memory is not a characteristic sign of pellagra, its apparent presence being really a sign of psychic impediments. The many-sidedness of the condition picture explains the view that all forms of mental disturbances may occur in pellagra. Pellagra does not cause true melancholia, and depression in pellagra is not dependent upon exhaustion, since it occurs also in well-nourished cases, and in favorable conditions of life. The contradiction between the views of Finzi and Vedrani is explained by the fact that both had not the same pictures before them. Furthermore hallucinations and disturbances of orientation occur episodically in pellagrous psychoses. Among the spinal symptoms, the marked diminution of farado-cutaneous sensibility and the occurrence of clonic muscular spasms in the so-called second stage deserve special mention.

As will be seen, Gregor's classification also is not above criticism; katatonic conditions are observed in his dementia and amentia groups, and his acute delirium differs only in degree from some of the same cases. Paranoic symptoms appear in the patients of several groups, and stupor with his anxiety cases. A neurasthenic condition preceded all of the psychoses, but his paralytic cases equally deserve separate grouping. He admits typhoid

pellagra without temperature, and pellagrous neurasthenia without somatic stigmata, while renouncing *pellagra sine pellagra*.

The only careful consideration of this broad subject that has come to my knowledge by an American physician, is that by J. W. Mobley (25) of the Georgia State Sanitarium. He says his cases fall principally under the intoxication, or infective-exhaustive group, and he has subdivided them under four headings:

1. Acute Intoxication Psychosis, with psycho-motor suspension.
2. Infective-Exhaustive Psychosis, with psycho-motor retardation or excitation.
3. Symptomatic Melancholia, with psycho-motor retardation.
4. Manic-Depressive, with psycho-motor retardation or excitation.

The question now arises: Under what group shall pellagrous insanity be classified?

Bucknill and Tuke (26) classify pellagrous insanity with alcohol under toxic insanity. Regis (27) classifies the pellagra psychosis with the psychopapathies of exo-intoxications; Mongeri, (28) under the infective psychoses, between the post-influenzal and Korsakoff's disease.

Bianchi (29) classifies pellagrous insanity under the toxic psychoses, with alcoholic, morphine and cocaine conditions, and separate from the infective group. Tanzi (30) considers it a toxic insanity.

CONCLUSIONS.

The association of pellagra with nervous and mental symptoms is common. This relationship is that of direct cause and effect, and is not an accident or coincidence.

Cases of pellagrous insanity have usually suffered from pellagra with neurasthenic symptoms for sometime before the development of mental symptoms. The psychoses are therefore, as a rule, the result of a chronic intoxication.

Some cases of pellagrous insanity appear to belong to the infective-exhaustive type of mental diseases, and others rather to the toxic group. In view of the fact that these two groups have been embraced under the comprehensive term of confusional insanity, many cases of the pellagrous psychoses may better be included under the general heading of confusional insanity.*

It seems to be admitted that the mental condition of pellagrins undergoes an early modifidation. This early mental state may be ill-defined or show itself by a greater moral impressionability, or greater psychical excitability, or it may be described under the general term of neurasthenia. Later inertia appears, the patients are apathetic, show psychomotor impediments. There is said to be intellectual hebetude, stupor or even mutism. Lombroso's "psychical catalepsy" may appear. If they are not silent, pellagrins respond with difficulty, or have the air of not understanding what is said to them. Insomnia is almost universal, and depression, (psychic pain) is characteristic. Stupor often ensues, and confusion, the type of exhaustion and intoxication psychoses, dominates the scene. The patients appear frightened, become suspicious, have ideas of demoniacal possession, refuse food and medicine, are subject to hallucinations, illusions, delusions, are suicidal (hydromania) and have other criminal tendencies. Episodic disorders of memory and orientation are observed.

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*It may be well to place here a summary of Kirby's views of the symptoms of confusional insanity: (31) A relatively short course, some delirium or very marked confusion, hallucinations, unsystemized delusions and later stupor and mental enfeeblement. Delirium varies according to the character of the individual and therefore may be absent or very severe and fatal. Hallucinations, delusions and disorders of memory and orientation vary in individuals and groups.

The effort is sometimes made to classify the mental condition of pellagrins as acute and chronic. *The acute*, commoner symptoms are: Temp. 39 degrees to 41 degrees C.; Neuromuscular excitement, subsulti, contractions, muscular rigidity, exaggeraated reflexes, confusion with phases of exaltation, and marked insomnia.

This condition is more common with alcoholism but may be engrafted upon the so-called chronic form. It is often manifested as an acute collapse delirium, and is probably the typhoid pellagra (pellagra typhosus) of some writers.

In chronic cases: Depression, confusion paresthesias, hallucinations, and illusions, memory disturbances, insomnia, exaggerated reflexes, ataxia, and terminal dementia.

Intermediate forms occur, being marked by alternations of depression and exaltation with remissions and apparent recovery. Excitement may break forth without cause, especially in the Spring and Summer.

Polyneuritis is sometimes observed.

For the chronic form, dementia is the common termination, but it may be complicated by paralysis or tuberculosis.

In the first attack the pellagra psychosis is an amentia, (confusional insanity). In the latter and progressive phase, marked by chronic and incurable cachexia, it is a dementia. It is an intermittent and progressive amentia, which if not cured, or if not early fatal, terminates in dementia. (Tanzi) Or it may end in chronic mental confusion or in pellagrous pseudo-general paralysis. (Regis.)

Depression and confusion are the more common mental symptoms associated with pellagra, but periods of exaltation (excitement) occur episodically.

Strictly there is no mental symptom-complex characteristic of pellagra, but pellagra may act as the exciting cause of several forms of nervous and mental states, varying from neurasthenia to polyneuritis and meningitis, and from simple depression to paretic conditions and dementia.

Under the influence of the pellagrous intoxication patients commit crimes—suicide, (hydromania) homicide, infanticide, incendiarism, etc.

According to the degree or duration of the pellagrous intoxication or possibly from idiosyncrasy, the patient is liable to develop the symptoms of acute collapse delirium at any time, and die in the attack.

It is not unlikely that the mental symptoms of pellagra may differ by seasons or in different countries and in different parts of the same country, just as broadly speaking, do the physical signs and symptoms of the disease.

After all may not Baillarger be right in questioning whether the pellagrous poisoning does not, like alcohol, produce these various neuroses and psychoses according to the reaction of different individuals?

Finally, in the language of Dr. Zeller, when we understand what pellagra is—"root and all, and all in all"—shall we not better understand what insanity is?

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A CONSIDERATION OF PAIN AS A SYMPTOM OF DISEASE INVOLVING THE RIGHT HALF OF THE ABDOMEN.*

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In selecting this subject I have not hoped to advance many new ideas nor, in the brief time allowed, to give consideration to all the affections of the right half of the abdomen, but rather to review the essential features which aid us in arriving at a diagnosis and present the same in a practical way most suitable for a better understanding of some of the more obscure manifestations of disease affecting this part of the body. To this end, I will discuss pain as it occurs and as it is complained of by patients in each of the several anatomical regions.

While I presuppose a fundamental knowledge of the topography and relative position of the organs contained within the abdomen, together with the physiology of the nervous mechanism concerned in transmitting painful sensations from the viscera to the central nervous system, there are certain phases to which I desire to direct attention now.

Whereas the spinal nerves ordinarily connect directly with the parts which they supply, it is different when they come to supply the viscera. Here the sympathetic system is interposed. This arrangement is for a diffusion of impulses, which is made possible by the fact that one efferent spinal nerve fibre may connect with several nerve cells in a sympathetic ganglion. These latter through their axis cylinder processes are capable of a much wider distribution than would be possible without such a system.

While the sympathetic constitutes the chief nerve supply of the abdominal viscera, certain spinal and notably one cranial nerve sends fibres directly to them. For example, the vagi, which together with the sympathetic supply the stomach, also supply fibres to the gall bladder, and greater part of the intestines. By reason of this extra vagus supply to the gall bladder and small intestine, pains originating in these organs are not infrequently referred to the abdominal organ chiefly supplied by the vagi, viz: the stomach. Hence, such pains as these are spoken of as *referred* pains.

Closely related to referred pains are the so-called *transferred* or *sympathetic*

*Read before the Tri-State Medical Association, in Richmond, Va., February, 1910.

pains, which are felt at some point on the skin instead of in the internal organ which is the source of the pain. This transference of the pain is explained on the ground that both the skin area and the organ involved receive their nerve supply from the same segment of the spinal cord and that the pain is often felt in the part of higher sensibility, that is the skin, rather than in the part of lower sensibility to which the stimulus is actually applied. We speak of the internal organs as being of lower sensibility because they possess only the common sensations of pain and are devoid of tactile and temperature sense.

Another very interesting clinical observation in regard to pain is its *incomplete localization.* While sensations of touch and of heat and cold are referred by the mind to almost the exact point of contact, the localization of a painful stimulus is not so definitely circumscribed. This is especially true of intense pains, slight pains being interpreted with a greater degree of accuracy. These observations apply throughout the body, but are more pronounced in the case of the internal organs. A familiar example of this incomplete localization is severe intestinal colic, in which the pain is complained of as being nearly all over the abdomen, the irritation probably proceeding from only a small part of the intestine, whereas, on the other hand, a mere twinge of pain in the abdomen is easily assigned to a fairly circumscribed area.

Lastly, we have to consider a variety of abdominal pain which I would term *reflex* and to which I shall refer again.

Thus it is seen that in the interpretation of abdominal pain there are various misleading and confusing factors, viz: Diffusion of pain, referred pain, sympathetic pain, incomplete localization of pain, and reflex pain. These should ever be borne in mind. Fortunately the tenderness or pain elicited on palpation leads us more correctly to the region involved and, if pressure upon an organ gives rise to pain of the same character as the spontaneous pain complained of, such organ may be safely considered the seat of the lesion.

For the purposes of my paper I will adopt a simple division of the abdomen by drawing one vertical and one horizontal line, the vertical line passing from the ensiform cartilage through the umbilicus to the symphysis pubis, and the horizontal at the level of the umbilicus and ending on either side at or a little anterior to the highest point of the iliac crest. The anterior portion of the abdomen is thereby divided into four regions, the right and left upper and the right and left lower quadrants. The upper quadrants are limited laterally by the continuation downward to the iliac crests of the mid-axillary lines, and the lower quadrants by the portions of the iliac crests anterior to the mid-axillary lines and by Poupart's ligaments. There are two posterior abdominal regions, each limited externally by the mid-axillary line, internally by the spinous processes of the lumbar vertebrae, above by the lower margin of the thorax, and below by the crests of the ilia and the iliolumbar ligaments. It must be borne in mind that these upper and lower boundaries are only superficial demarcations and by no means coincide with the deeper boundaries. This subdivision is not intended to replace those of Cunningham and others, which divide the abdomen into nine regions, but is only offered as a convenient one, useful in recording histories. Furthermore, it is not applicable in all cases, since patients frequently refer their symptoms to the middle portion of the abdomen instead of to one of the quadrants, when it becomes necessary to make use of the familiar terms, epigastric, mesogastric, and hypogastric regions.

It is essential to an understanding of diseases of the abdomen that we familiarize ourselves with a number of artificial and natural landmarks in their relation to the internal organs, for, while these landmarks may not overlie all the various organs, they serve as points of departure from which we can trace the outline of those which lie in proximity. Indeed, to my mind a through knowledge of the anatomy of the viscera is the foundation and most important step in diagnosing their diseases.

In each of the three regions of the right half of the abdomen there is at least one important organ which should always be excluded or included as a causative factor in the production of symptoms referable to the corresponding region. For example, in the right upper quadrant we have as a very frequent source of trouble the *gall bladder*, in the right lower quadrant the *appendix*, in the right posterior the *kidney*. These three are so frequently productive of mischief that we would make no mistake to speak of the right half of the abdomen as being divided into the gall bladder, appendix and kidney regions respectively. So, I will consider pain as occurring in the chief organ in its area and differentiate it from that which occurs in other affections.

Pain in gall bladder disease varies in character and intensity from a dull aching observed in mild cholecystitis to colicky and cutting pains, when there is a sudden hinderance to the egress of its contents. While the character of the pain gives us a probable idea as to the nature of the trouble (colicky pains indicating gall stones), experience teaches that about one out of every six or seven patients who complain of colicky pains are found to have no gall stones. Conversely, stones have been found in about three-fourths of the patients who had only the dull aching pains.

Deaver, in a recent article, lays stress on a sense of tightness or constriction across the epigastrium as being characteristic of gall stones and considers this a valuable aid in the differentiation from other lesions of the upper abdomen.

The location of pain originating in the gall bladder may be said to be in the gall bladder region and in the epigastrium. So often are so-called stomach symptoms referable to gall bladder disease that we have learned in recent years to consider seriously the possibility of the latter in all cases of long continued indigestion accompanied by distress in the stomach and more especially if these symptoms occur from three to four hours after eating, when the normal contractions of the gall bladder are known to take place. If these attacks of indigestion are separated by days or weeks of comparative freedom from same, it is all the more indicative of gall bladder disease. Gall bladder pains are also commonly referred to the region of the right scapula and less often to the right shoulder and appendix region. Tenderness over the gall bladder usually accompanies disease of this organ and is best elicited by placing the fingers deeply under the gall bladder and requesting the patient to inspire.

The most likely affections to be confused with gall bladder disease are gastralgia, gastric and hepatic carcinoma, inflammatory conditions of the liver, pancreatic disease, and intestinal colic. So far as the pain is concerned, it may be very similar, but the following differences have been noted:

In gastric ulcer the pain is more distinctly aggravated by taking solid food, though liquid food and especially albuminous liquids often relieve the pain by diluting the hyperacid contents of the stomach, whereas, when gall bladder pain is induced by taking food, there is no special difference between the effects produced by solids and

liquids and the pain in gall bladder disease is never relieved by taking food of any kind. As to the time of occurrence, this varies, but in pyloric ulcer and especially duodenal ulcer and gall bladder disease it is more apt to occur from two to four hours after eating. The point of greatest tenderness, however, is different in these three conditions. In gall bladder disease it is just below the lower border of the 9th right costal cartilage and is altogether less marked than in ulcer. In gastric ulcer it is in the median line just below the ensiform cartilage, sometimes to the left of this point, or in the transpyloric line, and posteriorly one inch to left of spine between the 10th and 12th dorsal vertebrae. In duodenal ulcer it is usually over the right edge of the bodies of the 1st and 2nd lumbar vertebrae, though it is frequently only in the median line, and often in gastric or duodenal ulcer the tenderness is diffuse over the epigastrium. So that, notwithstanding these points of difference, doudenal ulcer especially is frequently mistaken for gall stones. This would naturally be expected on account of the close anatomical relationship of the first two or three inches of the duodenum to the gall bladder, and it is in this part that at least nine-tenths of duodenal ulcers occur.

In addition to this source of error I have observed in two recent cases what I consider reflex painful contractions of the gall bladder dependent upon an ulcerated duodenum. In both cases there was more or less constant pain in the epigastrium and at times colicky pains in the gall bladder region extending through to the right infrascapular region. Others with myself naturally made a diagnosis of gall stones, but at operation I found none and the gall bladder appeared normal. From the subsequent history of these cases I felt justified in changing my diagnosis to duodenal ulcer. Therefore, I conclude that, whereas the emptying of the chyme into the duodenum reflexly causes normal contractions of the gall bladder with the pouring of its alkaline bile into the duodeum, the presence of an ulcer allows an undue irritation of the afferent nerve endings, which, instead of setting up a normal reflex, gives rise to spasmodic and painful contractions in its attempt to respond to the unusual stimulus produced by the action of the acid chyne on the ulcer.

Nervous gastralgia gives rise to spasmodic burning pain, independent of taking food, often relieved by the latter or by pressure upon the stomach.

Carcinoma of the stomach or liver give sensations of weight and continuous sensations of dull, ill-defined epigastric and hypochondriac pain with moderate tenderness over the lesion. Paroxysmal pain is occasionally observed.

In *abscess of the liver* the pain and tenderness are felt over the liver proper. The character of the pain is that of diffuse soreness. The accompanying symptoms and physical signs are usually sufficient to make the diagnosis clear.

Pancreatic calculi and *acute pancreatitis* produce sudden sharp epigastric pain which is with great difficulty distinguished from other acute conditions of this region.

In *intestinal colic* the pain is felt chiefly a bout the umbilicus and radiates in various directions.

Of course, in differentiating these conditions, the associated phenomena are of material assistance, but other than to elucidate the subjective symptoms of pain and tenderness is not the province of this paper.

The most frequent source of trouble in the lower right quadrant of the abdomen is the appendix. Appendicitis gives rise to pain which at first centers around the umbilicus, but which is later localized in the right iliac fossa. There are cases, however, in which from the beginning the pain is confined

to the right iliac region. The character of the pain is nearly always sudden and cramplike, though occasionally it amounts to only a dull aching and may even be absent, as is sometimes observed in gangrenous forms. Palpation reveals tenderness over a circle a few inches in diameter which usually has its center at McBurney's point. In chronic appendicitis the patient complains of an uneasiness or slight soreness in the appendix region, which is subject to acute exacerbations following slight causes such as indiscretions in diet, collections of feces in the caecum, or muscular exertion.

On account of the similarity of the pain in certain other affections to that of appendicitis, it has to be differentiated from the following:

1. *Appendicular colic*, in which the pain is identical, but, there being no inflammatory reaction, the tenderness is less marked.

2. *Enteralgia*, dependent on a neurotic or hysterical condition or on tabes. In this the pain is usually diffuse, but is most intense in the umbilical region.

3. *Intestinal colic* due to the presence of irritating substances in the intestines. This is characterized by severe paroxysmal pain most intense in the umbilical region, but showing more of a tendency to radiate in different directions than in simple enteralgia. The radiation follows the advancing peristaltic movements and the sensation of the shifting of intestinal gases is felt. There is usually no tenderness on pressure, but, on the contrary, the latter often seems to afford some relief,

4. *Intestinal obstruction.* The pain in this condition is like that in the early stages of appendicitis and intestinal colic. Later, in the course of these affections other symptoms and signs are added which make the differentiation easy.

5. *Renal Colic* and *Dietl's Crises* are sources of error in diagnosing appendicitis, but in these the pains appear to originate in the loin and radiate into the groin, testicle, and inner side of the thigh.

6. *Typhoid fever.* The swollen and tender ileum and mesenteric glands of typhoid fever have more than once caused surgeons to suspect appendicitis and even open the abdomen before discovering their mistake, The more gradual onset of the pain in typhoid fever, together with the absence of other features peculiar to the latter condition, will prevent error in most cases.

7. *Right salpingo-oophoritis* and *tubal pregnancy* may give rise to pain closely resembling that of appendicitis, especially when the appendix is situated lower than usual. A thorough pelvic examination coupled with a careful history of the case should serve to differentiate these conditions.

The last region for consideration is the *posterior* abdominal, which contains as its chief organ the kidney.

Kidney pain is referred to this region or, as it is commonly called, to the loin or small of the back, and varies in intensity from a feeling of discomfort or dull aching accompanying a slight movable kidney or a benign tumor, through the somewhat greater disturbance due to the passage of small sand, to the intense suffering of renal colic, consisting of paroxysms of agonizing, dragging pain in the loin of the affected side. Pain in the kidney, while having its greatest intensity in the loin, has a definite course of radiation, which is from the loin, following the course of the ureter, sometimes to the bladder, but usually to the groin, testicle and inner side of the thigh. This radiation corresponds to the distribution of the ilio-inguinal nerve, but also sometimes includes that of the anterior and genito-crural nerves. Exercise increases the pain of renal

calculus. Palpation usually reveals tenderness just below the last rib, especially when assisted by counter pressure in front.

Renal Colic, while commonly due to the passage of a calculus, may be caused by anything which produces a sudden blocking of the ureter, such as the twisting of the pedicle of an abnormally movable kidney (Dietl's Crises) or the passage of a clump of mucus, pus, or blood clot

Pain and tenderness in the loin are symptoms of acute inflammations of the kidney, such as *pyelitis*, *pyelonephritis*, *pyelonephrosis* and *perinephritic abscess*. In these the pain is of a stretching character, there is marked tenderness on pressure and, in the severer types, the slightest movement of the body increases the suffering.

Similar, but less marked pain, characterizes *tuberculosis* of the *kidney*, but the difference in the constitutional symptoms and the examination of the urine serve to differentiate these affections.

Peri-nephritic inflammation exhibits superficial tenderness, whereas inflammation of the kidney itself exhibits tenderness only on deep pressure and, according to Johnston, the tenderness of peri-nephritic abscess is most marked posteriorly just below the last rib, while the tenderness of true renal suppuration is most marked in front.

Lastly, we must differentiate *myalgia*. I use this symptomatic term to cover a large group of cases showing pain in the muscles or fascie, whether its origin be diathetic, rheumatic, neuralgic, or be due to a strain or exposure to cold. It is my opinion that the majority of patients who complain of pain in the posterior abdominal region are afflicted with myalgia or, as it is popularly known, lumbago. I cannot help having a feeling of resentment when I glance at advertisements in the lay papers with large headlines reading, "*Pain in the back means kidney disease*". This is made all the more repulsive by an accompanying cut of a man in the characteristic attitude of one suffering from lumbago. By always bearing this common condition in mind it ought rarely, if ever, be mistaken for anything else. The more superficial location of the pain, its evident dependence on bringing into action the muscles of the loin and lower part of the back together with the absence of constitutional and urinary symptoms, make a characteristic, picture.

I did not mention myalgia as a cause of pain in the anterior abdominal region because of its infrequent occurrence. It, however, should be borne in mind, as it is occasionally seen. Only a few weeks ago I had a case sent me for operation, a probable diagnosis of gall stones having been made. After keeping her under observation a few days, I was convinced that the pain was entirely in the superficial parts and so spared her an operation, and her physician and myself embarrassment.

A DISCUSSION OF NEW FACTS CONCERNING POLIOMYELITIS, ITS ETIOLOGY, EARLY DIAGNOSIS AND TREATMENT.

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Within the last decade over eight thousand cases of this disease have occurred; and of these, five thousand were in the United States of America. It is likely that at least a thousand people have been attacked in Pennsylvania alone this year; and in the District of Columbia a committee appointed to study the outbreak there has cognizance of over five hundred cases.

Thus, the situation is a serious one; and every new fact bearing upon the disease should be carefully weighed by each of us, until we have found means to prevent the spread of infection or have discovered a method of arresting the disease before the nerve elements are destroyed.

Etiology and Pathology—The disease is not a primary atrophy of the anterior horn cells from acute toxemia. It is a constitutional disease due to a living virus which causes an inflammation of the connective tissues of various organs, including the lymph glands and intestinal follicles. It is accompanied, too, by congestion of the spleen and of the mucus membranes. The meninges are inflamed, and the whole central nervous system is more or less hyperaemic. The destruction, however, vastly preponderates upon the region of distribution of the anterior spinal arteries, which supply the anterior cornua, the injury to the motor cells which produces the paralysis.

Those cells around which the inflammation is not so severe as to produce more than oedema quickly recover as the invasion ceases, and this accounts for the rapid return of power in some cases. Other cases where return of power is less rapid are accounted for by the reintegration of a destroyed axone, the pyramidal cell of which has escaped necrosis. In other cases, it is the fibres of the pyramidal tract which are mainly involved as they proceed towards the cells in the cornua, which themselves in part escape. Such a case is characterized by exaggerated reflexes and sometimes by Babinski's toe sign. Still another set of fibres may receive the chief impact; I refer to the rubro-spinal fibres, which also pass to the anterior cornua cells, through which they regulate muscular tonus. The loss of their influence leads to hypotonia and tremor, without paralysis so long as the pyramidal cells themselves are not implicated. Of course, the clinical picture may vary in different parts of the body in accordance with the differing incidence of the inflammatory exudate upon different segments of the cerebro-spinal axis; and in the same segment, some cells may escape where others are attacked.

Conveyance of the Disease—The salivary gland has been used by Levaditi to convey the disease from one monkey to another. In the Rockefeller laboratory, they have conveyed the virus by spraying into the nares an emulsion of nasal mucous membrane from a diseased animal. The most

infectious material, however, is the spinal cord. The cerebro-spinal fluid is infective only for a few days.

Carriers—It is believed that the disease may be conveyed by the medium of a healthy carrier.* Some hold very strongly that abortive, undiagnosed cases are responsible for the spreading of the disease so widely. If this is the case, isolation of ascertained cases must be of little avail, especially as there are other facts which seem to point to the superfluousness of isolation as at present conceived against this disease. An instance will make this clear.

Non-Contagiousness—A child aged eleven was attacked with acute paralysis at Bethesda, Maryland, this summer. She had been playing out of doors all day long for weeks with seventeen younger children, seven of whom were her own brothers and sisters. All of these were under careful observation by Dr. John Lewis, the Health Officer of the district, with whom I later saw the case. Not one of these children developed any sickness which would in the least point to poliomyelitis. No contact with another case could be traced, and none of the children had been to town for some weeks. It was the first case recognized at the time in the neighborhood.

Again, in the Washington Children's Hospital, some twenty-five cases of poliomyelitis have been admitted this summer, many of them in the acute stage. They were placed in the common ward; and at first no special precautions against infection were adopted. No patient in the hospital contracted the disease at that time. Latterly, spraying the nares has been employed, and a certain isolation has been maintained, in spite of which I understand that one case of poliomyelitis developed recently in a child soon after it left the hospital.

I need not instance further, for the number of examples where intimate contact has not led to contagion is legion.

Contagion—On the other hand, instances where known single contact has lead to the disease are not lacking. The Stromsburg, Nebraska, outbreak is the most striking example; and another has just occurred, and was observed by myself, during our study of the Washington epidemic.

At McKendrie, Md., in the practice of Dr. A. H. Perrie, the child of a railroad brakeman became febrile and paralyzed on August 1st. Fourteen days before she had visited Chesapeake Beach, to which many Washington people resort. Nine days later, this child's cousin was attacked. The contact consisted of a visit to a church fair where the children were together some hours. In the meantime, the doctor's own daughter, about Aug. 8th, was attacked by the disease, and later still another family who had been in contact had one child paralyzed. In the Washington report will appear the full history of the epidemic.

Proper Isolation—It is manifest from facts of this nature that either, (1) the number of immunes to this disease is very great, or (2) that certain bodily states render infection possible, or (3) that the manner of conveyance is very different from that against which precautions are being taken by those who advocate isolation. Proper isolation would consist of closing of the avenue of infection, and as we do not yet know this in nature, only isolation from everything can possibly safeguard. It is possible that the disease is really conveyed by an insect either as carrier or intermediate host. No one can forget the complete failure of quarantine to prevent the spread of yellow fever, until the false belief that it was carried by fomites was supplanted by the knowledge of its conveyance by the Stegomiga fasciata. Another

*Nebraska Epidemic; Dr. C. A. Anderson. Ohio outbreak; Dr. Frost, U. S. M. H. P. H. Service.

instance is the very simple conveyance of Texas cattle fever by the Boophilis bovis tick under conditions formerly thought so extraordinary.

IS NOXA PROTOZOAN?

Besides, evidence is not wanting to support the hypothesis that the infective agent may be a protozoan, in which case an intermediate insect host would be presumptive.

This evidence consists of the nature of the pathological reactions of the central nervous system. That there is a lymphocytosis of the cerebro-spinal fluid during the acute phase is now well-known. But no thorough study of the cytology either of fluid or neuraxis has yet been published. From eleven cases in different stages of evolution the sub-arachnoid fluid has been taken by the Washington Committee. A complete study of the cells has been made by Drs. Hough and Lafora. The method used is the precipitation of the cells by absolute alcohol, the embedding of the precipitate, and its section and staining as if it were a tissue. Even in the earlier stages there is some pleocytosis. The polymorpho-nuclears are abundant (15 per cent.) It is likely that they originate in the meninges themselves on account of the inflammation there. After a few days these cells are less numerous, and the pleocytosis consists mainly of lymphocytes, with some plasma cells. In some cases, mast cells are found. It is phagocytic macrophages, which cause the disappearance of the polymorpho-nuclears. As many as twenty may be found digested in a single cell, where they exhibit pyrominophile and fuchsinophile reactions, and may assume forms resembling the Leishman-Donovan bodies found in some protozoan disease. In the acute phase, it is usual to find altered erythrocytes due to minute hemorrhages where the inflammation is intense. Later on, altered lymphocytes, körnchenzellen, etc., occur. A moderate increase of pressure was found early in the disease; and there was usually an increase of the protein content sufficient to react positively both by the methods of Nonne-Apelt and Noguchi. No bacteria appeared in the stained preparations. Hough and Lafora are of the opinion that these appearances are in favor of the protozoan nature of the virus of poliomyelitis. Their researches will be fully reported in Folia Neurobiologica, and along with the report of the Washington Committee.

Early Diagnosis—Cases of poliomyelitis have often been called rheumatism. This is on account of the severe pain and great tenderness which occur when the meninges are much inflamed. The distinction, however, is quite easy; for in acute rheumatism the joints themselves are inflamed, and hence are hot, red and swollen; whereas in poliomyelitis there is no special heat, redness, or swelling of the joints or limbs. Besides, there is always a modification of the reflexes in poliomyelitis, and as soon as the horn cells of any segment are invaded the reflex arising in that segment is first diminished and later suppressed, often several hours before paralysis occurs. When the attack is mainly on the pyramidal fibres, either in the affected segment or high up in the cord, the reflexes may be exaggerated in that part of the body, supplied by those fibres. Again, before the meningeal inflammation has extended to the cord, there may be for a time exaggeration of reflex activity.

The *earliest symptoms* are usually one or more of the following: Great weakness with apathy or irritability, sometimes including photophobia; sometimes slight coryza; marked insomnia is often present (Ph. Roy, Washington Committee), and this in a child without fever or intestinal trouble should excite suspicion. When this is followed by great weakness, and

restlessness later occurs, suspicion is still stronger; and when profuse perspiration begins without a very high fever, I believe that the diagnosis should be made, more especially if any reflexes have diminished or Kernig' sign occurs.

Diagnosis from Cerebro-Spinal Meningitis due to the Diplococcus Intracellularis—*The Cerebro-spinal fluid*—In cases where restlessness and hypersensitivity usher in the illness, this diagnosis is sometimes impossible; and rather than lose valuable time in awaiting further symptoms, the meninges should be punctured and the fluid examined. Only in that way can we be sure of saving the child without damage, if it is the meningococcus which is at work. But even in poliomyelitis, lumbar puncture is rather an advantage than otherwise; for it relieves the pressure within the cerebrospinal sac, and probably diminishes congestion of inflamed structures. Examination of this fluid, too, may afford information; according to Flexner, there usually being a marked lymphocytosis in monkeys, the proportions being: polynuclears 40 per cent., lymphocytes 40 per cent., large mononuclears 15 per cent., eosinophiles 5 per cent.; while the blood count was polynuclears 60 per cent., mononuclears 25 per cent., lymphocytes 12 per cent., eosinophiles 3 per cent., occurring with a distinct leucopenia. This diminution of white corpuscles did not disappear until the acute stage of the disease subsided. It will be noted that these findings are different from those revealed by the more thorough examination in human beings by the Washington Committee. Inoculation of a monkey with cerebrospinal fluid from an abortive case may be used for diagnosis of a dangerous carrier. Vomiting is often an early symptom, and headache is the rule. Rigidity of the neck and Körnig's sign are most marked in the meningeal type of onset. In some cases the extremities are cold in spite of the general fever.

Treatment—*I. In the acute stage*—There are two distinct indications: The first is *to preserve life and prevent paralysis.* We have no certain means of accomplishing these objects, and the students of immunity are not hopeful of making a serum either to arrest the disease or to prevent its inception. Haxamethylenamine has completely failed to arrest the inflammation in cord and meninges, although it has been thoroughly tested in the Washington epidemic this year. There is, however, a remedy of which we may hope that further trial will show the use. I refer to mercury, the power of which over some infections has become better realized since it has been employed by injection into the muscles or veins.

A case—I have, however, only had opportunity to test it in one case of poliomyelitis during the acute phase. It was done because of a sudden advance of acute ascending paralysis in an adult who had apparently improved on the preceding day, the fifth of his disease. By lumbar puncture also, 10 c. c. of cerebro-spinal fluid were withdrawn. Headache and nausea were at once relieved, and the paralysis ceased to progress, while the temperature fell steadily. During three days, five doses were given of mercury bichloride of gr. 1-3 and 1-4 alternately. In another case of the same kind with which I was associated, the remedy was not tried, and the disease progressed to respiratory paralysis and death on the fifth day. Both these cases were adults, seen in consultation. The first with Dr. John Lewis, of Bethesda, Md., the second with Drs. A. B. Hooe and Roy, of Washington. It is true that the injections would greatly perturb a child, who is hyper-excitable from meningitis; but a temporary disturbance is preferable to paralysis or death; and much less pain is pro-

duced by the small needle used than by the injection syringe needle required when diphtheria or meningococcus disease are in question.

If the disease is protozoal, the rationate of mercury is evident; and it is possible too that some arsenical derivative may be applicable.

Many have recommended cupping and other derivatives to prevent spinal hyperaemia. The rationale of this is at least doubtful when we reflect that the hyperaemia is Nature's defense against further invasion.

Special indications are: The constipation and retention of urine, which should be met by copious enemata, and not by drugs to stimulate peristalsis, which is deficient, not because of local toxins, but because of interference with innervation at the centre. Sometimes, a catheter is required; but usually a flow from the bladder will follow a third or fourth enema, the first, indeed, often failing to expel any faeces.

(2) The second indication is *to minimize the pain and irritability* of the attack, and to secure rest and sleep. The warm bath, or hot pack, is most efficacious in some cases. It not only acts as a revulsive to soothe the nervous system and tranquilize the circulation by its warmth, but it has the mechanical function of supporting the limbs so evenly that there is no drag to stimulate afferent nerve impluses and add to the irritation due to the meningo-myelitis. Other measures which secure the same end are water or air beds; maintainance of the limbs in a semi-flexed posture by soft pads, and support of the feet by a firm one. Support of the back by a firm cushion, well warmed and not too hard, gives great relief; and the proper adjustment of the pillows under the neck is of great importance. An ice cap sometimes causes great distress, and its use has no justification except the thoughtless routine of orthodoxy. An immobilizing jacket has been of great service in giving comfort to some little patients.

Finally, after the inflammation has subsided, usually in about a week, galvanism should be used as a direct means of diminishing the pain which is derived from the stretching and sagging of joints, ligaments and muscles caused by the loss of tonus in the muscle groups paralyzed, sometimes aggravated by hypertonus of antagonists not paralyzed. The relief given in this way is surprising to those who have not tried it.

An adult case seen with Dr. Ammerman, of Washington, would gain a tranquil repose of over two hours after half an hour's application of galvanism to his paralyzed muscles. At other times, restlessness and pain were so great that only by morphine could he secure any sleep at all, and his day was a perpetual misery. The hot bath was unavailable at that time.

II. Treatment of Residual Paralyses—Little children are reluctant to essay movements of a partially disabled limb. When it is an arm, they let it hang and use the other; if it is a leg, they make no effort and prefer to be nursed and waited upon. Suspension in water greatly facilitates movement when the muscles are feeble. We, in Washington, can fully confirm the experience of the New York Committee, who found out how easily the child could accomplish little movements in a bath, which he was unable even to attempt when his limb was not so supported, and it is very easy for the mother or nurse to invent little play games to maintain the child's interest for an hour at a time while suspended in a warm bath. There is no danger in this so long as the water is maintained near blood-heat. The skin does not macerate, and the effect upon nutrition is most favorable. To stimulate the circula-

tion in the limbs, they should be massaged several times a day.

Galvanism—From this procedure one must not expect to procure regeneration of atrophied muscle and nerve. Surgeons know well that the muscles supplied by a cut nerve atrophy,—will not regenerate although they are massaged till dooms-day. If, however, they are galvanized from the beginning, atrophy will not occur; for the exercise of their contractile functions maintains the integrity of the muscle elements and it is only galvanism which can excite contractility when the motor nerve and its endings have degenerated. If treated by galvanism from the beginning, a living muscle cell will greet each regenerated nerve fibre which pushes to its destination. If galvanism is not used, only the envelopes of dead muscle spindles will be met with. The time for these to regenerate must then be added to the duration of every case not treated by galvanism. It is necessary to re-state these simple physiological facts on account of the vogue of the pernicious statement that no treatment of poliomyelitis should begin until four months have elapsed. This doctrine is another instance of unthinking orthodoxy. But if the elementary physiological considerations just presented make no appeal, I need only cite the high authority of Erb, Bergonie, Zimmern and Zappert, the distinguished Viennese paediatrician, (added to that Duchenne's final experience), who makes a practice of galvanizing the paralyzed muscles just as soon as the acute symptoms subside.

Mode of Application—The current should be applied only to those muscles which are paralyzed; and the negative pole should be placed over the muscle itself near its tendon of insertion, while the positive pole is attached to a large electrode applied over the abdomen or other indifferent point. It is useless to stimulate the motor point except during the first two weeks, i. e. before nerve-endings have ceased to be stimulable on account of degeneration.

Of course, contractures and other deformities should not be permitted; and even when paralysis is complete and irrecoverable, they can be largely prevented by the maintenance of proper posture. Orthopaedics is the resort of despair and the result of neglect of proper and early treatment and the prevention of deformities, but the weak muscles may be reinforced with advantage by elastic suspenders long before the case is resigned to orthopaedics.

AMEBAE AS THE CAUSE OF PELLAGRA.

W. B. YOUNG, M. D., ROCK HILL, S. C.

The subject of pellagra has been agitated so much recently and so few theories have been advanced as to its cause, that the public is ready to listen to any new suggestions.

It is my candid belief that pellagra is caused by one of the protozoa, ameba, which infects the large bowel.

An ameba is an unicellular organism consisting of an outer membrane known as ectoplasm, and a darker and granular inner membrane known as entoplasm. Amebae are recognized in the stools as pale greenish bodies having a stronger refraction of light than the surrounding fecal particles. The power of motion is by the mechanism of small finger-like projections known as

pseudopodia. These small protrusions are sent out, gradually increasing in size until the whole cell has flown into this protrusion, thus changing its position.

Some investigators tell us that there are two kinds of amebae, a harmful and a harmless. There are however other investigators fully as good who contend that all kinds are harmful. I am inclined to take the latter view. The so-called harmful variety is known as the entameba hystolytica, when the harmless is known as entamebacoli. These organisms are transmitted from person to person by the careless handling of feces passed by patients harboring amebae. The stools instead of being properly sterilized and disposed of by sanitary methods are thrown about the yard or garden, consequently much of the dejecta is washed into the wells through the holes in dilapidated curbing around wells; or carried down the wells by buckets which have been handled by the mother or children whose hands are covered with amebae after handling the stools of infected people. Again swarms of flies soon make their way to the exposed organisms, in carelessly handled stools, where they get their feet well covered; and from here they go to the dining room and deposit the microbes on the food.

These amebae after reaching the stomach by the above sources may find either a welcome or an unwelcome home. If the person is strong and the digestive tract normal, the organism is either destroyed or made harmless by throwing out a gelatinous coating, this coagulates, undergoing the process of encystization. Other amebae reach a person with low resisting power, or a sub-acid stomach—they find a welcome home. Here they multiply by fission and begin to bury themselves in the mucus membrane of the gut by throwing out pseudopodia. These pseudopodia are used as a wedge to separate the columnar cells. As these cells are gradually pushed apart the parasite inserts itself and then enters the substructure, where, I believe, it secretes a toxin. This toxin causes a necrosis of the cells which is followed by sloughing, thus leaving an ulcer. The exposed vessels of this ulcer bleed into the lumen of the gut. The irritated cells on the sides of the ulcer secrete a mucus. The irritating contents of the gut enter the ulcer and the irritation causes an increased motion of the intestine and afterwards an expulsion of the above described contents, hence we get our dysentery.

The ulcerated condition prevents the intestine from secreting a normal amount of digestive juices, and the insufficiency of the juices coupled with the toxin secreted by the amebae allow a putrefaction of the food. Absorption of putrefied products takes place and a catarrhal condition of the whole digestive tract results. The absorbing power of the intestine under these circumstances is below par, so that the water which is taken into the stomach is soon propelled into the intestine. On account of the lack or absorbing power of these organs, the water soon distends the gut. This increases the muscular contraction of the gut, and contents are then expelled, giving the diarrhoea seen in the late cases. Although little is known of amebae, they, in all probability, secrete a toxin—whether in their ordinary state or during the cycle of change into some other protozoa, is a question which will be settled later.

Everything thus far given on the etiology of pellagra has been hypothetical. So unsatisfactory have these hypotheses been, that they have been given little credence. The following sounds more reasonable than anything I have yet seen.

I believe that the amebae secretes an endogenous toxin which is absorbed by the circulatory system and carried

to different parts of the body. As the nerves are the most sensitive organs of the body and degenerate most easily, they are the first to suffer, thus accounting for the neuralgia symptoms, pseudotabes, blisters, etc.

Howell, in his chapter on the vaso-motor nerves says; "Low temperature stimulate the sensory fibers in the skin and the nerve impulse thus aroused reflexly stimulates the vaso-constrictor center of part of it and causes blanching of the skin. Exposure to high temperature on the contrary flushes the skin and in this case we may suppose the sensory impulses carried by the heat nerves inhibit the tone of the vaso-constrictor center and causes dilation or flushing of the skin. This being true, the dilation of the surface vessels on exposure to the sun may be greatly increased on account of the atrophy of the nerves of various parts—same as the knee jerks is greatly increased at the slightest stimulation. This being the case, the intercellular spaces are much widened, thus permitting the serum to exude into the surrounding structures. As we have said, the blood has taken up the poison secreted by the parasite; this does not give a rash, so long as it is kept within the vessels which are protected by an endothelial cell, but after exudation this cell is lacking and it sets up an inflammatory condition which results in death to the part and is afterwards followed by the shedding of the skin."

As evidence of these conclusions, I give the following: Wherever amebae are found in the South, pellagra is also found, for amebae are found in every case of pellagra at some stage of the disease. It may require a severe saline purge and warming stage, but they can be found when the stools are properly searched. At autopsy amebae lesions can be found in every case of pellagra. The lesion may only be limited to a hyperemia, but that can be found. All cases treated as amebiasis improve of pellagra symptoms if treatment is properly kept up.

Pellagra prevails in the months of April, May and June, on account of the ingestion of fruits and vegetables which contain quantites of sap. Thus the mucus membrane of the gut becomes irritated and a more fertile field for the amebae is furnished. In July and August the trouble subsides in proportion as vegetables are less sappy. With the return of cooler weather in September and fresh crops of sappy vegetables, we have a return of the symptoms noticeable in the Spring. Pellagra is more generally prevalent among poorly nourished people, and those with low vitality. Also its presence is to be noted in localities where the water is contaminated, where the hygenic surroundings are poor and the use of surface water is general.

Of course there will be some to say that amebae are not the cause of pellagra, since these parasites are found in the stools of persons showing no signs of the trouble. Agreed. By the same token it might be contended that pneumonia is not caused by a diplococcus because these are to be found in the nasal and bronchial secretions of persons entirely free of pneumonia; or that tubercular germs do not cause consumption, since 90 per cent, of the people at autopsy will show tubercular lesions while only a small part of these manifest symptoms during life, nor does the comma bacillus cause cholera, for they, too, are found in the stools of well people.

It is reported by Musgrove that in an examination of 300 people in Manilla, 101 were found to harbor amebae. Of these, 61 were suffering with dysentery, and 8 of the other 40 died of intercurrent diseases during the following two months. The autopsies disclose satisfactory evidence of amebic infection in all these cases. Within three and one-half months the

remaining cases, except two discharged from the prison, were found to be suffering from amebic dysentery.

In towns with no sewerage, and with unsanitary privies, the disease is quite common and is multiplying rapidly. It has been my privilege recently to visit some towns in North Carolina and several in South Carolina, especcially in the Peedee section. That section now is very prosperous, most of the towns having sewerage and Health Boards who look after sanitation. Pellagra is almost unknown in these towns. I was able to locate a few cases about in the rural sections. In the up-country towns where there is no sewerage, where there are careless Boards of Health, and where there are numbers of mill people, I found pellagra quite prevalent. I actually found one large town where hogs were kept in pens. In this town, I am told that three years ago there were only three cases of pellagra. Last year they had between twenty-five and forty cases. This year I am told that they have more than one hundred cases of pellagra and in the probability of four or five hundred cases of diarrhoea, which is due to amebae and, in my opinion, are focal points for the distribution of pellagra. If there is anything in my hypothesis, we are facing a deplorable situation; and if the people are not soon awakened to the state of affairs and make some effort to impede the progress of this malady, it will soon equal the Black Plague in its ravages.

Even if the spoiled corn theory be adhered to, it is important that efforts be made to check the spread of amebae. For the amebae is a troublesome protozoa, whether or not it is the cause of pellagra; it should have the same attention it is receiving in Manilla by the health officers. To do this it is necessary the towns should have efficient Boards of Health with powers to take action when deemed necessary, also a competent bacteriologist should be employed to co-operate with the Board of Health. Every case of diarrhoea should be made a reportable disease and the bacteriologist should be sent to that case to examine for amebic infection. Wherever found, the case should be properly looked after and the stools should be disposed of by sanitary methods. Towns should install modern sewerage systems in the tenement districts. The landlords, where possible, should be required to put sewerage in each house. If this is impracticable, public toilets, at the expense of the town, should be placed at convenient intervals for the poor. All old privies should be removed so that there could be no chance for them to be used. At mill villages, these precautions should especially be carried out. A modern water system should be installed in each town and everybody should be required to use water from this source. All surface wells should be covered after freezing seasons. If any part of the town and mill village is off from the mains and inaccessible to this water, a surface pipe should be run for use during the Summer months. All houses should be thoroughly screened, and if a fly should enter the house, it should be chased until destroyed. Dairies should have the closest observation. As suggested by Dr. Thayer, there should be some lectures on how the people ought to care take of themselves and on dietetics.

In small towns and in rural sections, the above precautions are out of the question, and in this event we have to resort to simple methods of sanitation. Modern privies should be installed and these should be fly-proof, and the holes covered every time after use. Large buckets, which do not leak, to be emptied and disposed of by sanitary methods at least once a week, should be used. Deep pumps should be installed at every house on a farm and

wells should be done away with entirely. It is safe even in this case, to boil all drinking water after freezing season is over.

I hope every doctor in South Carolina will meet with me in Columbia next January, when the Legislature assembles, to help urge the passage of laws that will improve sanitation in the State. The best solution of this question is suggested by Dr. Price, of Baltimore. He recommends that the County Commissioners be authorized to make and enforce rules to govern the disposal of urinary and fecal matter within the county. The sanitary work of the County Commissioners should be under the supervision of a central authority and subject to being superseded by the central authority for non-performance of duty or weak administration.

FROM THE PUBLIC HEALTH REPORTS.

DEATH RATE AMONG CHILDREN.

A Great Part of the Diseases are Preventable, a Census Bulletin States.

Washington, D. C., *September 23, 1910.*—Of the total number of 732,538 deaths in 1909, in the Census Bureau's death registration area, representing a fraction over 55 per cent. of the provisionally estimated population of continental United States, no less than 196,534, or 26.8 per cent., were of children under 5 years of age, and 140,057, or 19.1 per cent., were of infants under 1 year of age. It appears in the Census Bureau's forthcoming bulletin on mortality statistics for 1909.

In general, one death out of five that occurred during the year 1909 was of an infant under 1 year of age, and a little more than one death in four, or about 27 per cent., was of children under 5 years of age. The registration cities showed slightly higher and the rural part of the registration States showed slightly lower proportions than those for the registration area as a whole.

The proportion of deaths of children under 5 years of age to the total deaths that occurred in the year is far greater than that of any other five-year period, a fact which, the bulletin states, does not indicate necessarily that the actual mortality or death rate per 1,000 persons living is higher than that at certain other periods, especially those at the more advanced ages. The early years of life, however, are of special importance, not only because of the large number of deaths that occur therein but also because, perhaps in greater proportion than that of any other period of life, a great part of these deaths are entirely preventable, and the causes which produce them are not being successfully combated. Great progress has been made in the reduction of infant mortality in England and other foreign countries in recent years, and a special organization has been formed lately in this country, known as the American Asociation for the Study and Prevention of Infant Mortality, whose object is to coördinate all the sanitary agencies available for the special purpose of reducing the number of preventable deaths of infants. It would be extremely desirable for such an important purpose that reliable statistics of infant mortality should be available for the entire registration area, and, as soon as possible, for the entire United States, with which the registration area for deaths will ultimately be coterminous. The correct statement of infant mortality, however, which is a

technical term denoting the number of deaths of infants under 1 year of age per 1,000 living births, depends on the accurate registration of births, which is scarcely to be found in the United States, the bulletin states.

"In default of the proper statement of infant mortality, based on comparison of the deaths of infants under 1 year and the registered births, recourse may be had to the ratio between the deaths of infants under 1 year of age and the population by sex under 1 year, but the latter ratio is unsatisfactory for many reasons and is not available except by process of estimation for intercensal years. A very crude means of judging of the relative condition of a given area as regards the general extent of infant and child mortality is to compare the total number of deaths of infants under 1 year and of children under 5 years of age with the total number of deaths registered for the year. Other things being equal, that is to say, with substantially similar populations with respect to age distribution and in the absence of epidemic diseases prevailing at higher age periods, the relative proportions of deaths of infants and children to the total number of deaths should show approximately the importance of infantile diseases and the feasibility of reducing the general mortality by efforts directed toward this class of disease.

"The per cent. distribution of deaths of infants under 1 year to the total deaths for all ages ranges from 11 for California to 23 for Pennsylvania and South Dakota, and for children under 5 years of age from 15 for California to 33 for Pennsylvania and South Dakota.

"The colored population of Maryland, the only state for which a comparison of white and colored is available, shows still higher ratios, namely 24 and 34 per cent., respectively. The lower proportion of deaths of infants in California may be explainable in part by the high proportions of deaths of non-residents from tuberculosis and other diseases at more advanced periods of life and perhaps the relatively small proportion of children. The high ratios for Pennsylvania and South Dakota are related also to the high birth rates of those states.

"For individual cities it happens frequently that the presence of an institution in which many deaths at advanced ages occur lowers the proportion of deaths of infants and children, although the infant and child mortality may be fairly high.

"As stated by Dr. Arthur Newsholme, medical officer of the local government board of England, in his recent report on 'Infant and child mortality:'

" 'The subject of child mortality is of national importance. One out of three deaths at all ages occurs under 5 years of age, one out of five during infancy, and one out of nine total deaths at all ages occurs under three months of age.

" 'Infant mortality is the most sensitive index we possess of social welfare and of sanitary administration, especially under urban conditions.

" 'A heavy infant mortality implies a heavier death rate up to 5 years of age, and right up to adult life the districts suffering from a heavy child mortality have higher death rates than the districts whose infant mortality is low.

" 'A careful study of the death rate of England and Wales during the last fifty years at each of the first five years of life leaves it doubtful whether any appreciably greater selection or "weeding out" is exercised by a heavier than a lighter infant mortality. Any such effect, if it exists, is concealed behind the overwhelming influence exerted by the evil environment to which children are exposed in districts of high infant mortality. It is strictly correct, therefore, to say that a high infant mortality implies a high prevalence of the conditions which determine national inferiority.' "

WHITE PLAGUE'S DEATH RATE DECREASES.

MORTALITY FROM CONSUMPTION, CANCER, TYPHOID, ETC., IN 1909, SHOWN IN CENSUS BUREAU'S BULLETIN.

WASHINGTON, D. C., *September 26, 1910.*—While the total number, 81,720, of deaths from tuberculosis in 1909 was greater than for any preceding year and exceeded by 3,431 the number, 78,289, compiled for 1908, the death rate, in the Census Bureau's death registration States and cities, showed a decline from 173.9 in 1908 to 167.5 per 100,000 estimated population in 1909, as reported in the forthcoming Census Bureau bulletin on mortality statistics prepared by Dr. Cressy L. Wilbur, chief statistician for vital statistics, and submitted to Director Durand.

The 1909 rate is the lowest on record for the census registration area, although it should be remembered that the rates for this area, in which large additions were made in 1906, 1908, and 1909, may not be strictly comparable throughout the period covered with respect to constitution of population. The addition of the new registration State of Ohio for 1909, for example, by bringing in a considerable rural population with a normally low death rate from tuberculosis would tend to depress the death rate from this cause for the registration area as a whole.

It is remarkable, the bulletin states, that the aggregate of registration cities, which is not affected by the transfer of cities from the group of cities in non-registration States to the group of cities in registration States, shows practically the same number, 54,461, of deaths for 1909 as for 1908, which was 54,466, or a decrease of only 5 deaths.

DEATHS FROM TUBERCULOSIS DECREASING.

Excluding Ohio, which is shown only for 1909, 11 of the 17 registration States for which data are given presented numerical decreases in deaths from tuberculosis for 1909 as compared with 1908, the largest being for New York (415) and Rhode Island (107). Deaths from tuberculosis increased in Washington (91) and California (78) among the 6 States showing more deaths from this cause. Among the larger cities the chief fluctations were increases of 85 for St. Louis, Mo.; 61 for Minneapolis, Minn.; 58 for Toledo, Ohio, and 56 for New Haven, Conn.; significant from their small amount; while decreases of 222 occurred for New York, N. Y.; 194 for Philadelphia, Pa., and 149 for New Orleans, La.

Cancer showed a much greater proportional increase in the number of deaths than tuberculosis, rising from 33,465 for 1908 to 37,562 for 1909. The death rate increased from 74.3 to 77, the latter being the highest crude death rate from cancer thus far recorded for the registration area of the United States.

It should be remembered, the bulletin points out, that cancer is one of the diseases having a peculiar age distribution for which the study of crude death rates is apt to be especially misleading, and until a careful analysis can be made of the data, with reference to the population details available after the compilation of the census of the present year, it will be wise to limit inferences to the fact that the number of deaths so reported and the crude rate from this cause show a constant tendency to increase from year to year. The probability of more accurate statement of this disease as a cause of death by attending physicians must be taken into consideration, and the fact that the saving of lives from tuberculosis and other preventable diseases of early or middle life would leave more persons subject to cancer at the cancer ages, and thus increase the total number

of deaths from this cause and the crude cancer rate, although the actual incidence of the disease at the various periods of life may not have been altered materially.

The distribution of cancer according to location on the body shows little change except a diminution of the residual group due to more accurate statements of physicians. All certificates of death by cancer should state, whenever ascertainable, the site of origin of the disease.

DEATHS FROM CANCER INCREASE.

The uniform tendency to increase in the number of deaths reported from cancer is shown in the totals reported for the registration States and cities for 1908 and 1909. All the 17 States for which data are given for the two years showed more deaths from this cause in the latter year, except Maryland and South Dakota, for which slightly diminished numbers were returned. Of the 36 large cities only 5 showed more deaths from cancer in 1908 than in 1909, and the amounts of decrease were very small in each case. The numerical increase in the deaths registered from cancer was not large for any particular State or city, but the most impressive feature is the widespread increase shared by all states and cities with but few exceptions.

The total number of deaths caused by typhoid fever in the registration area for the year 1909 was 10,722, a reduction of 653 from the number, 11,375, recorded for the somewhat smaller registration area of 1908. The death rate fell from 25.3 to 22 per 100,000 estimated population, these rates being based on the populations as estimated upon the average annual increase between the last two censuses.

The typhoid fever death rate for 1908 was the lowest recorded since the series of census annual reports was instituted, and the rate for 1909 shows a marked reduction from that of the previous year. It is nearly one-third less than the rate shown for the five-year period, 1901-1905 (32.2), although still more than twice as large as that of England and Wales. The success already obtained in its reduction should encourage further progress in this direction until residence and travel in this country shall be as safe in this respect as in the best regulated countries of Europe, where the disease is becoming practically negligible as a menace to public health.

A DECREASE IN TYPHOID.

Each of the registration States for which data are available for the two years, except Washington and Wisconsin, shows a smaller number of deaths from typhoid fever for 1909 than for 1908, and as their population has increased during that time it is evident that the typhoid death rate has likewise decreased for each. Ohio, which was admitted into the group of registration States for the first time for 1909, is, of course, not included in this comparison. If the 1,276 deaths from typhoid fever in Ohio were not included for 1909, the group of registration States as constituted for the years 1908 to 1909 would show a reduction of 1,406 deaths from this cause. The largest numerical reduction is that of Pennsylvania (738), then Massachusetts (132), California (88), Maryland (87), and New York (73). The increased numbers in Washington (20) and Wisconsin (15), were but small and probably less than the relative increase of population.

A considerable part of the reduction in the number of deaths from typhoid fever that occurred in Pennsylvania was due to the decreased number registered in Philadelphia (188) and Pittsburg (125). Of the 36 larger cities, 19 showed fewer deaths from typhoid fever for 1909 than for 1908, and in no city of this group was there any marked increase in mortality from this cause. The largest amounts of numerical decrease occurred

in Philadelphia Pa. (188), Columbus, Ohio (135), Pittsburg, Pa. (125), Boston, Mass. (68), and Chicago, Ill. (61). The greatest relative decrease was that of Columbus, Ohio, from the epidemic prevalence shown for 1908.

FEWER DEATHS FROM INFLUENZA.

Pneumonia and Tuberculosis Still Head the List of Fatal Diseases.

Washington, D. C., *September 24, 1910.*—There was a noteworthy decrease in the number of deaths from influenza, commonly called "grip," in 1909, in the Census Bureau's death registration area, representing over 55 per cent. of the estimated population in continental United States in the year in question, it is to be seen in the census bulletin on mortality statistics for 1909, prepared by Dr. Cressy L. Wilbur, chief statistician for vital statistics, and submitted to Director Durand.

The deaths from influenza numbered 6,649 in 1909, as compared with 9,989 in 1908, in the registration area. This is considered remarkable since bronchitis and pneumonia, diseases classified under respiratory diseases but usually closely associated with influenza, showed, for bronchitis about the same number of deaths, and for pneumonia a marked increase for 1909.

Pneumonia, in the aggregate, caused more deaths than other diseases, except tuberculosis. The number increased from 61,259, or 136 per 100,000 population, in 1908 to 70,033, or 143.6 per 100,000 population, in 1909, the latter number being only 7 less than the number, 70,040, from tuberculosis of the lungs. The rates for both years were lower than for any previous year of the decade.

Diseases of the nervous system increased from 71,090 for 1908 to 74,656 for 1909, the amount of increase, 3,566, or 5 per cent., being slightly less than the average for all causes. The death rate fell from 157.9 to 153.1 per 100,000 population. The increased number of deaths in this class was due chiefly to apoplexy, those reported from meningitis showing a marked decrease.

Diseases of the circulatory system largely increased, both in the number reported, 80,607 to 90.456, or 12.2 per cent., and in the death rates, 179 to 185.4, based upon estimated population. Increased deaths and rates are shown for pericarditis, endocarditis, heart disease, angina pectoris, diseases of arteries, and diseases of veins. The greater part of the numerical increase in this class was due to organic heart disease, 5,933, or 9.9 per cent., although the proportional increase of endocarditis, 912, or 15.2 per cent., and diseases of the arteries, 2,239, or 28.2 per cent., is greater. The remarkable increase of the latter would seem to show a tendency to report arteriosclerosis, one of the chief diseases included, as a cause of death.

Diseases of the respiratory system showed about the same amount of increase as disease of the circulatory system for 1909 as compared with the preceding year. The number rose from 81,758 to 90,868, an increase of 9,110, or 11.1 per cent., while the death rate increased from 181.6 to 186.3 per 100,000 provisionally estimated population. Bronchitis showed about the same number of deaths in 1909 and 1908, with a reduction in 1909 in the death rate from 26.9 to 24.9 per 100,000 population. The increase in this class was largely due to pneumonia.

Diseases of the digestive system, chief among which is diarrhoea and enteritis affecting infants under 2 years of age, increased but slightly in the number of deaths registered for 1909 (2,323, or 2.6

per cent), while the death rate based upon an increased estimated population fell from 199.1 to 188.6. No diseases of this last class showed higher rates of any consequence, and the mortality from infantile diarrhoea, 91.5 per 100,000, was lower than that for any recent year, although not as low as that of the five-year period, 1901-1905, which was 89.4.

Diseases of the genito-urinary system increased from 51,717 for 1908 to 57,070 for 1909, the difference of 5,353, or 10.4 per cent., corresponding to the similar rise observed in diseases of the circulatory system. The death rate increased from 114.9 for 1908 to 117 for 1909. Bright's disease constituted the chief cause of death in this class, and is the only one that showed a notable increase.

Disease incident to childbirth showed a slight increase in the total number of deaths, 7,344 to 7,791, and a decrease in the death rates per 100,000 estimated population, 16.3 to 16. It should be remembered that the rates given, which are based upon the total estimated population, should be doubled to show the mortality, approximately, of females, and increased still more to show the mortality of the special class alone susceptible, namely, females of child-bearing age, or, with closer approximation, married females of child-bearing age. Such ratios can not be given until population data shall be available for comparison. Nearly half of the deaths of women that result from child-bearing are due to puerperal sepsis, an entirely preventable disease, and for which ignorant and careless midwifery is chiefly responsible.

Fewer deaths and lower death rates are recorded for 1909 than for 1908 from meningitis. So far as the varieties of meningitis can be distinguished from the returns, there would seem to be a marked remission of epidemic cerebrospinal meningitis for the past two years as compared with the years 1904 to 1907. Only 2,191 deaths from this cause were compiled for 1909, a decrease of 409 from 1908, while meningitis as a whole decreased 1,051 in the same time. The death rates from all forms of meningitis, 16.1, and from that portion compiled as epidemic cerebrospinal meningitis, 4.5, were lower for 1909 than for any year since the beginning of these reports in 1900. Fewer deaths were registered from meningitis for 1909 than in the preceding year in every one of the registration States, and in all but 6 of the 36 great cities. No city showed any considerable increase, the largest being 23 for Detroit, Mich.

Of comparatively trifling numerical importance as a cause of death, diabetes shows a slowly progressive tendency to increased mortality, perhaps dependent, as with cancer, upon the advancing age distribution of the population. The number of deaths increased for the registration area from 6,274 for 1908 to 7,024 for 1909, and the death rate per 100,000 estimated population rose from 13.9 to 14.4. The amounts of change for individual States and cities are too small to be significant, but it is noticeable that the decreased numbers were shown in but comparatively few cases.

There were 21 deaths in 1909 caused by German measles, including 1 reported as 'French measles" and 9 from 'rubella;" 84 from chickenpox; 34 from mumps; 1 from roseola; 1 from Rocky Mountain spotted fever (Garfield County, Colo.); 3 from glanular fever; 10 from beriberi (8 Japanese, 2 Chinese, all on the Pacific coast, except 1 Chinese at Bayonne, N. J.).

606.

Is there really something new in the treatment of syphilis? If we may judge from the enthusiastic reports now coming out of Europe and some parts of America, there is. However, it behooves us to be rather wary before we accept without question the statements which are being bandied about—we still have rather fresh in our minds the wonderful false hopes which were raised relative to Baird's trypsin treatment for cancer.

It is worthy of note that Ehrlich himself, the originator of the already famous 606, cautions moderation in the passage of judgment on this new remedy. He avoids extravagance in his claims and, by so doing, again demonstrates the greatness and breadth of his viewpoint. Without doubt, he has made a great discovery and has already worked a great advance in therapy; but likewise without doubt the remedy is still under adjudication and is not yet in such a position as would justify its being hailed as a sure cure for lues. So far as we may judge the remedy is a most potent one—in one series of cases, 82 out of 83 cases responded immediately by a disappearance of spirochetae and a mitigation of symptoms, and equally favorable reports came from a series of several thousand cases experimented with in clinics abroad. As to the end results, no judgment can yet be given but the promises are excellent so far as can at present be seen.

Some strains of spirochetae seem to be resistant to the arsenic preparation as some strains are resistant to mercury. However, if even 90 per cent. of cases of syphilis could be cured by Ehrlich's 606 or by any other remedy, especially by one hypodermic injection, Professor Ehrlich has conferred a boon upon humanity which will be recorded in future years as the equal of Jenner's vaccination or of Lister's antisepsis. We devoutly hope the reports are true. If they are, Syphilis is robbed of its terrors and a vast proportion of our race can be made comparatively happy. But caution is necessary in the acceptance of the statements, or else an orgy of indulgence and an era of repining might result.

CULTIVATION OF TISSUES OUTSIDE THE BODY.

Another step forward in the study of disease was reported recently in a modest account by Carrell and Borrows (Journal A. M. A., Oct. 15, 1910) of their experiments with the cultivation of adult tissues outside the body. This successful experiment might be considered as far reaching as the cultivation of bacteria. To be able to grow individual tissues *in vitro* and to study their growth under the microscope in itself is wonderful enough, and in addition to be able to inoculate these tissues with diseases, as cancer, and to study the changes so produced, is still more important. It is epoch making.

Carrell and Borrows have grown various tissues in a plasmic medium, and have watched their growth. They have been enabled to develop typical kidney tubules and tissue, typical thyroid tissue, connective tissue, etc., and have been able to carry on successive generations of cells in these cultures. They have inoculated these cells with sarcoma, and with success.

It is sufficient to start the most varied conjecture as to what the results of their work may be.

For instance, should we let our imagination run riot, we might easily look forward to the unlimited production of certain tissues *in vitro* with organo-therapeutics the great beneficiary; or to the supplanting or replanting of such healthy tissues in the place of old, worn out, or diseased ones. Or we might predict a selected type of human beings from certain selected cultures of ovaries, and so it goes. As a matter of fact, however, the probabilities are that the matter will rest as a laboratory curiosity for many years, or at most as a means for the study of histology and of pathology.

MISTAKES IN DIAGNOSIS.

In the same issue of the Journal of the A. M, A. appears a study of mistaken diagnoses by Dr. Cabot, of Boston. With such men as Osler and Cabot confessing to a large proportion of failure of diagnosis (See Osler's Practice of Medicine, article on yellow fever), it is certainly gratifying to us lesser lights to find that we are not such hopeless idiots after all.

One of the most painful sorts of arrant idiot with which we medical men have to meet is the cocksure diagnostician, who never has known himself to have made a mistake. Occasionally we run across such a one, and usually find a loud-voiced, self-satisfied individual who is quite sure that he has all medical lore at his finger tips. He is usually only superficially informed and fundamentally ignorant—he has never learned that he knows little, nor that knowledge brings humility.

All of us make mistakes, all of us err, but most of us learn from our errors and are the better for them. Any one of us who is never conscious of having erred is a public menace and had better quit the practice of medicine. "He that knows not and knows not that he knows not is a fool—shun him." A man is a fool, not when he makes a mistake, but when he does not profit by his experience and avoid the same errors in future.

MEDICAL MATTERS AND LAY MAGAZINES.

For several years there has been an increasing tendency among the lay magazines to deal with medical or semi-medical matters in their columns. A gradual change has come in the tone of these articles and a much cleaner and clearer outlook has been achieved by their writers than formerly. We are glad to note that some of the writers are investigating some of the so-called curist cults and are exposing them mercilessly. In Hampton's Magazine for October, 1910, is an article entitled "Malicious Animal Magnetism," which deals with Christian Science and with its founder and disciples in a coldly judicial and impartial manner and which ruthlessly lays bare the cant, the hypocrisy and folly of the cult. Of course, to medical men, this is no new tale, but to the laymen the exposure will probably prove of value. We suggest that such practitioners as are annoyed by the spread of this cult might recommend the perusal of this article by such laymen as show a tendency to go astray and follow after such false leaders as Mrs. Eddy and her clan.

In the November issue of the same magazine there is an article by Dr. Woods Hutchinson, written in his inimitable style on "The Passing of Pills and Powders." Dr. Hutchinson, like "Mark Twain," has the happy faculty of driving home good points with a delightfully humorous style.

It is a pleasure to see Hampton's in the line with some other magazines in this work of educating the public.

When Collier's Weekly, two or three years ago, began the crusade against patent medicines, they started a movement, the value of which was only dimly realized. It required a deal of moral courage to institute such a campaign, and the originators as well as those who had the courage to keep up the fight deserve unbounded praise. They wrought a world of good. Not only in this particular line but also in regard to spiritualism, faith cures, and a host of other fakes, has the investigation proceeded. Other magazines have taken the same course, and now it is common to see hygiene and sanitary discussions in non technical language, as well as exposes of frauds and fakes. The Ladies Home Journal, The Saturday Evening Post, Everbody's and a number of other high class magazines are adding their quota. The result is bound to be good.

Another noticeable feature in these articles is the gradual diminution of the hysterical exaggeration formerly seen and the more sane, quiet discussion of these topics. By this sanity panics are averted and the real status of various epidemic diseases are pointed out. It is to the credit of the medical profession that such advance has been made that most epidemics have been confined or averted through preventive measures; and it is very much to the credit of the lay press that they are ceasing to make capital of the ignorance of the masses by making scare heads of disease.

Of course, we meet from time to time with certain journals which show a tendency to decry medical progress, or which advance absurd hypotheses and uphold them with all their might. Chief among these are the journals which oppose vivisection and vaccination. If it were not pitiful, their position would be absurd. They speak from the depths of a colossal ignorance and yet speak as if with authority—consequently, being read by a large number of people, they work incalculable harm. It is a matter for regret that such an excellent publication as *Life*, one so independent and, ordinarily, so evenly balanced in its view points, should have become imbued with such retrogressive ideas as to champion antivivisection and anti-vaccination. It is but a step from this position to the old days of faith in charms and of shot gun quarantine.

While we wish these anti-vivisectionists no harm, we cannot help wondering whether they would refuse to have transfusion done by Crile's method should one of their loved ones be in danger of death, or if they would refuse to allow the use of Flexner's serum should one of their children develop epidemic cerebro-spinal meningitis.

But these reactionaries are fortunately few, and the large proportion of the magazines are doing excellent work. The few who are opposed to progress, we hope are sincere in their convictions, for if they are not, they have a grave charge to face—that of indirectly causing useless suffering and even numerous deaths.

SOCIETY REPORTS.

Abbeville, no report, 5th month.
Anderson, no report, 7th month.
Aiken, no report, 3d month.
Bamberg, no report, 7th month.
Barnwell, no report, 7th month.
Beaufort, no report, 7th month.
Charleston,
Cherokee, no report, 3d month.
Chester.
Clarendon, no report, 6th month.
Colleton, no report, 6th month.
Darlington, no report, 7th month.

Dorchester, no report, 7th month.
Edgefield, no report, 7th month.
Fairfield, no report, 7th month.
Florence, no report, 7th month.
Georgetown, no report, 3d month.
Greenwood, no report, 7th month.
Hampton, no report, 7th month.
Horry, no report, 7th month.
Kershaw, no report, 7th month.
Laurens, no report, 7th month.
Lee, no report, 7th month.
Lexington, no report, 2d month.
Marion, no report, 3d month.
Marlboro, no report, 7th month.
Newberry, no report, 3d month.
Oconee, no report, 3d month.
Orangeburg, no report, 7th month.
Orangeburg, Calhoun, no report, 2d month.
Pickens.
Columbia, Richland County, no report, 3d month.
Saluda, no report, 7th month.
Spartanburg.
Sumter, no report, 7th month.
Unoin, no report, 7th month.
Williamsburg, no report, 7th month.
York, no report, 3d month.

Charleston, S. C.—Several interesting papers have been read and cases reported at the recent meeting of the Medical Society. Dr. Kollock reported two cases of steel particles penetrating the eyeball. Dr. Rees reported a case of gallstones presenting only digestive symptoms and Dr. Sosnowski reported two cases of adherent pericarditis, one of them tubercular; Dr. Townsend, a mastoid case presenting all the symptoms in exaggerated form and Dr. Matthew Moore an unusual typical case of amyotrophic lateral sclerosis.

On October 15th, the paper of the evening was read by Dr. Baker on the "Post-operative Treatment of Surgical Cases," provoking much favorable discussion.

Lately, the Society has lost two members by death, Dr. B. Wagner Hunter, a man of extensive practice in this city and noted for his skill as a physician, his charity and his breadth of human feeling. On Oct. 11th, the Society lost Dr. J. Somers Buist, one of the most distinguished physicians of South Carolina and one of the few remaining surgeons of the Confederate Army. Dr. Buist was a man who had contributed much towards medical science in this State and was noted not only for his professional skill but for his distinguished personal attainments and as a teacher of medicine. He is mourned not only by a host of friends and patients, but by many of the younger members of the profession, who remember him as a beloved teacher.

W. CYRIL O'DRISCOLL,
Sec.

IN MEMORIAM J. SOMERS BUIST, M. D.

The following was presented at the last meeting of the Society:

"When you have lived your life,
When you have fought your last good fight and won,
And the day's work is finished, and the sun
Sets on the darkening world in all its strife;
Ere the first touch of sleep has dulled the brain,
Ere the heart's springs are slow and running dry,
When you have lived your life,
T'were good to die."

We appreciate and endorse the truth of the poet, as we gather around the bier of our comrade, Dr. John Somers Buist, at the close of his "three score years and ten," a life crowded with activities of all sorts, and successes more than ordinary. True, the gloom and isolation of the sick room were his for three long years, but his busy work was finished, and we bow to the decree of a kind and merciful Creator, always trusting when we can not see.

Dr. Buist was a home product, and served the major part of his life in and for Charleston. Born on November 26, 1839, he received his literary and medical education at the Charleston College and at the South Carolina Medical College, leaving only at the call of the State to repel the presence of the invader. For four full years he did the full measure of his duty as a medical officer, first with the Hampton Legion, and afterwards with Haskell's Artillery. The seven

days' fight around Richmond, and the siege of Petersburg were active duty enough for one man, but they were but a small portion of what fell to his lot; these he performed with his accustomed energy and devotion.

Upon the restoration of peace, he returned to this city. To the duties of a practitioner of medicine, he added those of City Physician, member of the Board of Health, Surgeon of the Roper Hospital and of the U. S. Marine Hospital, Adjunct Professor of Materia Medica and of Clinical Surgery at the Medical College, Professor of Surgery, Medical College, President of the Medical Society of South Carolina and of the South Carolina Medical Association.

Among his non-professional activities, he became Vice-President of the New England Society, Commissioner of the Charleston Orphan House, Trustee of the College of Charleston, President of the Alumni Association, Member of City Board of Health, Director in the Charleston Consolidated Railway, Gas and Electric Company, and Director of the Dime Savings Bank. In Masonry he attained great success, being elevated to the 33rd degree Scottish Rite.

After life's fitful fever, he sleeps well.

The Medical Society of South Carolina records its deep sorrow at the loss of its comrade, Dr. J. Somers Buist, and dedicates a page in our Minute Book to his memory.

2nd. We tender to his bereaved family our heartfelt sympathy.

3rd. Resolved, that a copy of this memorial be sent to the family and be published in the Journal of the State Medical Association and in the daily press.

Manning Simons, M. D.
John L. Dawson, M. D.
T. Grange Simons, M. D.

Chester, S. C., Oct. 8, 1910.

The October Meeting of the Chester County Medical Society was lacking in nothing, except a full attendance.

After the routine business Dr. W. B. Cox read a very interesting paper on "Chronic Gastritis," which had many good points for those who had not given the subject especial study.

Dr. C. A. McLurkin presented a case of infantile spinal paralysis, which in view of the abundant literature recently upon the subject, was very interesting and was freely discussed. Dr. McLurkin has had a number of these cases in the past six or eight months.

The Society has lost two of her oldest members in the past year—Dr. A. F. Anderson and Dr. W. J. W. Cornwell. Both of these had spent more than a half century in the active practice of medicine. There are few men in the State who have had so long a length of service.

During the summer Dr. J. G. Johnston has taken special work on the Eye and Ear at Tulane.

Dr. S. W. Pryor spent some time at the Mayo Clinic and in Chicago.

W. R. WALLACE,
Secretary.

IN MEMORIAM.

Whereas, It has pleased the Infinite Ruler to remove from our Society, our oldest and most honored member, Dr. W. J. W. Cornwell; and,

Whereas, his life was spent in modest endeavor to relieve human suffering, without any effort to accumulate unto himself anything but the good will of his people and knowledge pertaining to his chosen profession, gained through the many years of experience, therefore,

Be it Resolved, that this Society, profoundly grieved in the loss it has sustained, express its high esteem for

his unselfish life and noble character; and,

Further Resolved, that these resolutions be inscribed in the Minutes of the Society; that a copy be sent to the South Carolina Medical Journal for publication, and a copy be sent to the bereaved family.

H. E. McConnell,
J. G. Johnston.
W. R. Wallace,
—*Committee.*

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The following program was received from The Columbia Medical Society, Dr. Knowlton's Office, Columbia, S. C.

Officers: President, Samuel E. Harmon, M. D.; Vice-President, Robert A. Lancaster, M. D.; Secretary, Mary R. Baker, M. D.

Programme: Monday, October 10, 1910, 9 P. M. Report of Clinical Cases—Enlarged Spleen, Dr. H. W. Rice; Poliomyelitis, Dr. J. J. Watson. Voluntary Reports—Paper, Electricity in the Treatment of Some Uterine Diseases, Dr. L. K. Philpot; The Part Played by the Mouth in the Digestive Process: Our Duty and Relation to Same, Dr. F. M. Durham.

Voluntary Papers—Business, Adjournment, Refreshments.

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The Pickens County Medical Society met Oct. 5, 1910. Vice-President Dr. C. N. Wyatt called the meeting to order; Dr. W. M. Sheldon, President, was absent. Dr. H. E. Russell was elected to read a paper at the next meeting of the fourth District Medical Association. Dr. J. E. Allgood was elected alternate. Dr. W. A. Tripp, of this Society, is President of the Fourth District Medical Association. The members of this Society are very enthusiastic over the Fourth District meeting and anticipate a nice time. Dr. Curran B. Earle, of Greenville, S. C., delivered a very forcible address at this meeting on the Improvements in Modern Surgery, and Western Hospitals, as I have seen Them. On motion of Dr. H. E. Russell, Dr. Earl was thanked for the able address. The Fourth District Medical Association meets in Greenville, S. C., Nov. 21, 1910.

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At the October meeting of the Spartanburg County Medical Society, presided over by the President, Dr. A. R. Fike, the following members were in attendance: Drs. Black, Boyd, W. H. Chapman, Gantt, Jefferies, Lindsay, D. H. Smith, D. L. Smith, W. A. Smith and J. R. Sparkman. As this meeting was the one appointed at which to discuss raising Spartanburg's portion of the Sims Monument fund, the members of the General Assembly from this County were invited to attend in order that they might be familiar with the subject when the bill is introduced in the Legislature. Mr. J. W. Mansfield, however, was the only member of this body present and promised to do what he could for this cause. Dr. Jefferies read a very interesting and full sketch of the life and work of the great surgeon, J. Marion Sims. As the attendance at this meeting was so small it was decided to continue the discussion of raising our contribution until the annual meeting in December, when the attendance is generally large. Dr. Wm. J. Keller was accepted as a member of this society, his membership having been transferred to us from the Dillon County Society.

L. ROSA H. GANTT,
Secretary.

ANNOUNCEMENT.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The United States of America, the Dominion of Canada, the Republic of Mexico, the Republic of Cuba:

Meeting in 1911, Havana, Cuba, December 4th to 9th.

Office of the Secretary, Washington, D. C., November 5, 1910.

To the Editor:

The American Public Health Association will hold its 1911 meeting in Havana, Cuba, from December 4 to 9. The prospect of having the Association again in Havana has aroused the warmest interest among the physicians there, the Secretary of Sanitation, Dr. Varona, being particularly interested. The Academy of Medicine has offered its building for the general section meetings. The Hotel Sevilla will be the headquarters of the Association. A few years ago a meeting in Havana would probably have discussed yellow fever. The changed situation in Cuba with respect to that disease is shown by the fact that yellow fever has been so completely extinguished on the island that the local physicians desire rather that tuberculosis be given the most prominent place. The question of the milk supply will also be considered.

It is hoped at this meeting that the recently organized Sociological Section, and the Section on Sanitary Engineering, which was tentatively authorized by the Milwaukee meeting, may be put upon substantial foundations.

PERSONAL ITEM.

Dr. C. C. Haskell, of the research department of the Lilly Laboratories, has returned to his office in Indianapolis after an absence of about three months. Dr. Haskell spent the summer studying infants' diseases in the Hospitals of New York City.

CURRENT MEDICAL LITERATURE.

THE ANESTHETIST; A SPECIALIST.

BY C. O. ABERNETHY, B. S., M. D.
(The Southern Medical Journal, Aug., 1910.)

This is a day of specialists. Men are beginning to realize that there is a limit to what one mind can accomplish and are therefore confining their work to the special branches of their professions. This idea has been so much emphasized that the internal medicine man is becoming as much a specialist as the ear, nose and throat man. Until recent years the subject of the administration of general anesthetics was not given the serious consideration that other professions of our profession were; the majority of the surgeons being content to turn the anesthetic over to the least experienced of their assistants while they themselves were perfecting their technique in operating; thus was neglected one of the most important branches of our profession. The greatest advantage to the surgeon in having a trained anesthetist is that he is relieved of all the responsibility of the anesthetic and he can do better work because the patient is kept more evenly anesthetized.

Why have not more men entered this branch of the profession? One

reason is that the surgeons have not in the past realized the importance of having a trained anesthetist. Competent men have refrained from entering this field because the fees were not sufficient. An anesthetizer cannot do very much work outside. Most surgeons allow their anesthetizer a smaller fee than their first assistant, forgetting the fact that the anesthetizer's duties and responsibilities are much more important than his assistant's. In fact they are second in importance not even to the surgeon himself. On account of this small fee nurses are being used in some places as anesthetizers. Women when they are competent make good anesthetizers, because they have more sympathy as a general rule than men, and have that ease of approaching a frightened patient which is such a great advantage. Still, before they are allowed to become anesthetists they should be required to take a course in medicine, because, on their judgment and skill depends the life of the patient in many instances.

STREET DUST AS A FACTOR IN SPREADING DISEASE; METHODS OF REMOVAL.

BY JAMES M. ANDERS, M. D.

(New York Medical Record, Oct. 1, 1910.)

It may be put down as an axiom that cleanliness of our city highways and freedom from street dust is not less important to the municipality than a pure drinking water. supply The question of the noxious influences exerted by street dust may be conveniently considered under two heads: (a) the effects of the inhalation of non-infectious street dust; and (b) street dust as a vehicle for conveying disease germs, or the influence of infective dust. Street dust deposits contain mineral particles, which form mechanical irritants, organic matter, both animal and vegetable, of numerous and widely different conditions and character. The organic substances, if allowed to lie in the streets for too long a period, particularly during the warm season, undergo more or less decomposition, giving rise to other and yet more powerful deleterious products. There is still another constituent of dust which it should be the pride of every community to eliminate, since its ill consequences are far-reaching; I refer to dessicated human expectoration. Little does the general public appear to understand that in street spitting we have one of the worst examples of the violation of sanitary laws and decency that could be cited. Thompson observes that it is no exaggeration to state that nine-tenths of the acute inhalation diseases and chronic catarrhal diseases are due chiefly and directly to dirt inhalation.

In view of the overwhelming mass of evidence, which proves the presence of lurking dangers of street dust, a warfare against this form of air poisoning until victory is assured would be both timely and of the utmost importance. Among measures advised by a committee appointed by the Stuttgart Medical Society in 1907, to discuss the question of the prevention of dust were to keep the streets carefully cleaned and warning notices in regard to the dangers of dust to be placarded by the Board of Health. Slack says: "Street sweeping at night, such as is usual in market districts, is to be commended, thus avoiding the stirring up of large quantities of dust during the day when the streets are crowded. Oiling and watering the streets are wise sanitary precautions, and money spent on these means of keeping our streets free from dust is saved a hundred times over in the health of the people." It is in accordance with the eternal fitness of things that the American Climatological Asso-

ciation should wage a campaign against dust-laden street air, and thus increase its powers of administering to the welfare of the general public.

CULTIVATION OF ADULT TISSUES AND ORGANS OUTSIDE OF THE BODY.

BY ALEXIS CARREL, M. D. AND MONTROSE T. BORROWS, M. D.

(Journal of The A. M. A., Oct. 15, 1910.)

The solution of many problems of human pathology depends, in a large measure, on the finding of the still unknown physiologic laws of generation, growth and evolution of cells. A few weeks ago, we began to investigate systematically one of these future methods, namely the cultivation of adult tissues outside of the body. In the first part of the work we found and studied the growth of adult tissues outside of the body. In the second part we attempted to cultivate thyroid cells in series, and also to activate the growth of a tissue by passage from one plasmatic medium to another. Connective tissue, cartilage, peritoneum, bone marrow and bone, skin, thyroid gland, spleen, suprarenal gland, kidney, ovary and lymph gland, were all cultivated successfully. Tissues like cartilage, and even renal substance, can be caused to develop in something like normal manner under entirely new conditions.

The main results of these observations can be summarized in a few words: Adult tissues and organs of mammals can be cultivated outside of the animal body.

The cultivation of normal cells would appear to be no more difficult than the cultivation of many microbes. It remains, however, to be determined whether continuous series of cultures can be secured. This method, therefore, can be used for the study of many important problems. For instance, it may render possible the cultivation of certain micro-organisms in conjunction with living tissue cells, or alone in plasmatic media. Then it will be of great value in the study of the problem of cancer. We have already succeeded in inoculating a plasmatic medium with sarcoma of the fowl; cells appeared in the surrounding plasma after nine hours and the culture is growing actively at present. We can assume therefore, that the perfection of the method of cultivating adult tissue of mammals outside of the body will be helpful in the exploration of unknown fields of human pathology.

ANAPHYLACTIA.

A PHENOMENON CAUSED BY PROTEINS OF TOMATOES, CRABS, BERRIES, BIVALVES, EGGS AND OTHER FOODS.

A PRELIMINARY NOTE. BY LEONARD K. HIRSHBERG, M. D

(The Journal of The A. M. A., Oct. 15, 1910.)

The causes of the various urticarial diseases are usually classified as predisposing, external, and internal. The predisposing causes have been called "susceptibility," "indigestion," "infancy," "rickets," "jaundice," etc.

Now, it is my assumption that certain individuals are sensitized to tomatoes, grapes, berries, or other specific protein, and the absorption of their particular protein from the food brings on an attack.

The recognition of the offending protein whether its invasion is by mouth or by injection, whether it is by the olfactory route or by the circulation direct, is of such clinical importance that internists dare no longer ignore the applications of our present knowledge of anaphylaxis.

In all of the dermatologic clinics of sea-coast or river towns, there is

seen in the crabbing season an erythematous, progressive cellulitis of the hands. "Crab-hand" has been a mystery, as far as its immediate etiology is concerned.

One individual may pass through different degrees of prophylaxis (immunity) alternately with states of anaphylaxia. Thus a tomato may at one time cause no symptoms, at another time in the same individual, erythema multiforme; again angioneurotic edema. The curative treatment is to remove the offending dietetic irritant.

GANGRENE OF THE LUNG WITH TRICHOMONAS INTESTINALIS AS THE ONLY APPARENT ETIOLOGIC FACTOR

Report of A Case.

BY G. C. DOOLEY, A. B. M. D.,
(Journal A. M. A., Oct. 15, 1910.)

Instances of the invasion of the respiratory tract by mastigophora are very few, so that a report of a case of gangrene of the lung in which the trichomonas was the only discoverable etiologic factor may find a place in the rather scanty records of pulmonary disease due to or associated with this protozoon.

This is the evidence in the report of the following case:

History. The family, personal and social histories present nothing pertinent to the case of the patient, Private E. C. He had had chills and fever in July, 1909. On June 21, 1910, he was admitted to the post hospital with the same trouble, diagnosed and treated as tertain malaria, and was discharged as cured July 3, 1910. In the Winter of 1909-10 he injured the left side of his chest by falling on the pommel of his saddle while mounting his horse and was confined to the hospital for a week.

Present Illness. July 10, 1910, the injured side began to give him trouble under severe drill, and two days later he began to have a great deal of pain in the left side, and felt sluggish. He also had headache and dull ache over the root of the left lung, which continued throughout the illness. On admission, July 15, 1910, besides the pain, he felt weak and was expectorating blood-tinged sputum.

Examination. Temperature was 101.8 F., respirations 20 and pulse 80 per minute. There was an area or dullness between the left anterior and posterior axillary lines extending from the third to the fifth rib. Course bubbling rales were heard throughout the left chest; otherwise the physical signs were negative. The blood, urine and feces were normal; the latter contained no parasites. The sputum was thin at first, white, with blood-streaks, later much increased in quantity, dark, rusty, prune-juice color and foul odor. It contained elastic tissue, masses of epithelial cells, Charcot-Leyden and hematin crystals. Besides a few bacteria, there were numerous actively motile trichomonades.

During the first twenty-four hours the sputum amounted to but 1 fluid ounce or so, but during the course of the disease it increased to between 3 and 4 fluid ounces per day. During the last week of the disease the amount of sputum gradually lessened, the foul odor disappeared and the quantity of blood in it was reduced until there were only a few corpuscles present. In every examination numerous active trichomonades were noted until the last week of the disease, during which they gradually decreased in number and lost their motility. There were still a few present in the sputum on the day of the patient's discharge (August 5, 1910) from the hospital. At no time were there more than a few bacteria present in the sputum.

Course of the Disease. At no time during the patient's confinement in the hospital did the temperature rise above normal after the first twenty-four hours, but ranged between 97.6 and 98.5 F. The pulse and respiration were normal throughout, The sputum and pain in the side were the only noteworthy symptoms, and on discharge (August 5, 1910) only a slight soreness over the root of the lung remained, the foul and bloody sputum and pain having quite disappeared. The patient has reported twice since discharged, at intervals of a week, for observation, and at the last visit seemed to be in perfect health.

A STUDY OF MISTAKEN DIAGNOSIS.

BASED ON THE ANALYSIS OF 1,000 AUTOPSIES AND A COMPARISON WITH THE CLINICAL FINDINGS.

BY RICHARD C. CABOT, M. D.

(Journal of The A. M. A., Oct. 15, 1910.)

The subject of this paper was suggested by my experience in a weekly conference with senior medical students at the Harvard Medical School. At this conference the organs obtained from all the autopsies performed at the Massachusetts General Hospital during the week preceding are brought before the class. I never let anyone

inform me beforehand of the autopsy findings. Dr. Oscar Richardson reads the autopsy protocol and demonstrates the organs.

I must first explain, as nearly as I can, the plan followed. In each case I have gone behind the recorded diagnoses and endeavored to reason out what diagnosis was justified by the facts known during life. In some cases, it has been clear, after a little study, that the clinical diagnosis actually written on the records had been hurriedly filled in by an interne and did not represent the opinion of the attending physician. I recall one case in which the clinical diagnosis still stands as "neurasthenia" although the autopsy record shows that the patient died of cancerous pleurisy. "Burnt-out" or obsolete lesions are often undiscovered during life and lead, therefore, to a discrepancy between ante-mortem and post-mortem findings.

In order to keep this paper from extending beyond its already inordinate length, I shall try to condense the rest of my data into maxims which should have the merit of brevity if not of wit or clearness, incorporating my summary and conclusions with them.

1. Never make a diagnosis of uremia in a patient seen for the first time in an acute illness characterized by coma or convulsions. Such diagnoses rarely turn out right.

2. Never make a diagnosis of ptomain poisoning without definite chemical evidence. General peritonitis or a tabetic crisis is usually the correct diagnosis.

3. Make no diagnosis of hysteria, neurasthenia or psychoneurosis in a patient whose symptoms begin after the forty-fifth year. The actual diagnosis is likely to be arteriosclerosis, hyperthyroidism, dementia paralytica or pernicious anemia.

4. Diagnoses of tertian malaria in patients whose symptoms resist quinine more than three days are almost invariably wrong.

5. Bronchial asthma, beginning after 40, usually spells heart or kidney disease.

6. Epilepsy, beginning after 40, usually means dementia paralytica or cerebral arteriosclerosis.

7. Typical migraine is often a symptom of unrecognized brain tumor or chronic nephritis.

8. Most cases of "bronchitis" means tuberculosis, broncho-pneumonia or multiple bronchiectasis cavities.

9. Aside from the immediate results of acute infections (such as scarlet fever, diphtheria, tonsillitis and pneumonia) "acute" nephritis usually turns out to be chronic.

10. Acute gastritis and gastralgia usually mean appendicitis, gall-stones or peptic ulcer.

11. Pus in or near the liver is often mistaken for serous or purulent pleurisy, for it produces identical signs in the right chest posteriorly.

12. An X-ray of the shin-bones may give the first hint of an active syphilitic process in the joints or internal viscera.

13. Systolic or presystolic murmurs, heard best at the apex of a markedly enlarged heart, rarely mean valve lesions.

14. Diastolic murmurs at the base of the heart are very uncertain evidence of aortic disease unless there are characteristic jerkings in the peripheral arteries.

15. Myocarditis is a diagnosis which should never be made clinically.

16. Besides the direct evidence afforded by the history of the various methods of physical and chemical examination, diagnosis profits much by taking account of certain familiar pathologic chains or groups of them. Given one or two members of the group, it is often wise to act as if the other were present, provided, of course, that the

direct evidence in no way contradicts us.

17. Cerebral localization applied to tumors, hemorrhages and the like, is still in its infancy.

18. The clinical diagnosis of the so-called diseases of the blood is the easiest and safest in medicine.

MEDICO-LITERARY NOTES.

(New York Medical Journal, Oct. 22, 1910.)

Good Housekeeping celebrates its silver anniversary with the October issue. Practical Victories of Medical Science, by Dr. Thomas Lathrop Stedman, is a popular history of a few things accomplished by the profession despite general indifference or worse. For More Brightness in the Home is a satirical article by Wallace Irwin, making fun of the efforts of young wives to make home attractive; Nathan Straus, in A Message to Housekeepers, tells of the advantages of pasteurized milk; The Child's Bill of Fare, by Dr. H. H. Hawxhurst, is not a criticism of the popular restaurants, but a useful list for mothers. It will be seen that medical lore has much to do with successful housekeeping.

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We have stated that, much to our peace of mind at least the nice looking orphans are quickly rescued from asylums and adopted by carefully selected guardians, and have wished that the plainer ones and the crippled could have the blessings and advantages of family life, which they would probably repay by manifesting mentalities greater than those of their more beautiful rivals. The October *Delineator* offers six children for adoption, but they are so charming in appearance that we need hardly worry over their future.

In the October *Everybody's*, The Poison Bugaboo, by Samuel Hopkins Adams, dissipates several superstitions of our boyhood and states very truly that the most dangerous poison bearing animal we have is the mosquito, too long merely a subject of careless joking on our part.

THE PRESENT ORGANIZATION AND WORK FOR THE PROTECTION OF HEALTH IN THE UNITED STATES

(U. S. Treasury Dept. Bulletin)

BY WALTER WYMAN, SURGEON-GENERAL, U. S. PUBLIC HEALTH AND MARINE SERVICE.

In describing the present organization and work for the protection of health in the United States, in accordance with the programme of this thirty-eight annual meeting of the American Public Health Association, I shall begin at the outmost circumference of the influence of the United States organization, viz., the protective measures at foreign ports and in our insular possessions. If you should visit Japan and China, you would find medical officers of the Public Health and Marine Hospital Service attached to the United States consulates. These officers keep themselves informed of contagious diseases in these cities and the surrounding country. They are required to sign a bill of health which certifies that all the regulations required to be enforced at foreign ports on vessels leaving for the United States have been complied with. Officers are also located at Calcutta, Naples, and Libau, Russia. Other sanitary ports where these guards may be found are Santiago, Chile; Calloa, Peru and all the ports of Central America. In the Philippine Islands, where the government is by commission and a legislature, much

work of value to the public health is performed in the bureau of science under the insular government. In Hawaii you will find ten medical officers conducting the national quarantine. In Porto Rico there are nine officers. In the Canal Zone there are two commissioned officers.

The Public Health Service may be found in the States investigating other diseases than those named in the epidemic law. In various States of the Union there are thirteen establishments engaged in the production of vaccines, antitoxins and serums which play so important a part in modern therapy. In passing through the States toward the national bureau at Washington, it will be observed that each individual State has its own health department or State board of health. There are forty-six States and therefore forty-six State boards of health. In the District of Columbia is the hygienic laboratory, exclusively for public-health investigations. Officers are detailed to receive instruction in this laboratory, thus enhancing the scientific attainments of the corps. The Bureau of the Public Health and Marine Hospital Service at Washington consists of seven distinct divisions, each presided over by a commissioned medical officer. These divisions are: 1. Scientific research and sanitation; 2. Foreign and insular quarantine and immigration; 3. Domestic (interstate) quarantine; 4. Sanitary reports and statistics; 5. Marine hospitals and relief; 6. Personnel and accounts; 7. Miscellaneous division.

Dr. Francis R. Hagger, Professor of Genito-Urinary Surgery, George Washington University, has written a very valuable and instructive paper on STERILITY IN THE MALE, operative treatment of the same, with report of cases. The Ohio State Medical Journal, September, publishes the paper in full from which we take the following extract:

"Until the last few years whenever a man would present himself to a physician complaining of a fruitless marriage, the wife was looked upon as physically incompetent. With the advance in genito-urinary surgery, the condition of the semen and seminal tracts have been carefully studied with the result of proving that in unfruitful marriages the husband is the sterile member of the family in about one case in six. Sterility in the male is due first to aspermia; second, to azoospermia; third, to oligsopermia; fourth, anatomical abnormalities.

A few cases have been cited where none of the reasons cited would hold, but these have been explained by the belief that the semen was perverted in quality or deficient in quantity through depression or cachexia. Then, too, we are forced to consider the theory of lack of affinity of the one cell for the other.

In bilateral syphilitic and tuberculous disease, a considerable portion are sterile. Dr. Martin of Philadelphia gave an impetus to the more careful consideration of the male as a possible factor of childless marriages. A robust appearing man of 38, married several years, wife had been examined and no cause for sterility found, was operated upon by Dr. Martin. Patient had had gonorrhea with double epididymitis some years before. Examinations after operation revealed live spermatozoa. Patient's wife has since given birth to a child. The operation is a minor operation. It cannot compromise the function of an organ that has already proven functionless. The only chance for recovery of patients suffering from sterility due to obstruction of the epididymis is operative.

MATHEMATICS AND MEDICINE.

BY CAPT. LOUIS C. DUNCAN, MEDICAL CORPS U. S. ARMY.

(The Military Surgeon, Oct., 1910.)

It might be thought that there is little relation between two sciences so widely separated in object and method as mathematics and medicine. The point at which they meet is that where figures are requisitioned to show the quantities and ratios of disease, injuries and deaths. We see long columns and extensive tables of figures arranged to present readily to the eye the death rates in various places, the number of various diseases, and many other medical and sanitary conditions.

Not all medical men are mathematicians and consequently these tables are not always logical. How do these errors arise and what is the remedy? It is one of the simplest facts of mathematics that in order to measure two unequal quantities a single fixed standard is necessary. To make any comparison we must have one standard of measurement. In this case it is not necessary to search for some complex value. We already have a standard universally used in time of peace; it is the number of deaths in a thousand men in one year. In time of peace no one thinks of comparing death from disease with death from accident.

One army has twice as many deaths from disease as in battle; another army has four times as many. What follows, what conclusions may be drawn as to the relative sanitary services? Absolutely none. This system of comparison should be abandoned once for all.

The idea of comparing disease with battle arose some years ago when the world, and more especially the taxpayer, was not convinced of the necessity for organized medical departments for armies. The comparison was good and legitimately used but since then it has been perverted. It is against this perversion, with its resulting haziness, confusion and positive errors, that I protest.

LOCAL EFFECTS OF GALL BLADDER INFECTIONS AND GALLSTONES UPON THE DIGESTIVE TRACT AND LIVER.

BY FRANK BILLINGS, M. D.

(Illinois Medical Journal, Sept., 1910.)

Infection of the gall-bladder may be either acute or chronic and may be associated with the presence of gallstones. The clinical course of gall bladder infections and cholelithiasis is quite uniform, and a careful analysis of the symptoms and thorough investigation of the physical condition will usually enable one to make a diagnosis. I have made an analysis of the conditions of sixty patients suffering from cholelithiasis to ascertain the secretions and motility of the stomach in this class of patients. Of these sixty patients, fifty suffered from cholelithiasis with cholecystitis and ten suffered from cholecystitis with cholelithiasis of the gall-bladder and common duct. Motility was disturbed in forty-five of the sixty patients during acute exacerbations of the disease as shown by vomiting. The analyses of the stomach conditions of these sixty patients would seem to indicate that the digestive power of the stomach was not disturbed by cholecystitis excepting in the acute attack or in exacerbations of the chronic disease. Constipation is the rule in cholecystitis and gallstones.

GALLSTONE DISEASE AND ITS RELATION TO INTESTINAL OBSTRUCTION.

BY JOHN B. MURPHY, M. D.

(Illinois Medical Journal, Sept., 1910.)

Obstructions of the gastro-intestinal tract by gallstones may be divided into two distinct epochs. First, that which preceded the appearance of the monograph of Courvoisier in 1890; and, second, the period from 1890 to 1910. In reviewing the statistics of abdominal surgery in 1890, after Senn had accomplished his master work in the abdomen, it seemed to me there was no other class of disease left that offered so much for surgical attack as those of the biliary tract and liver. I therefore began, in 1890, experimenting on dogs, and in 1892 perfected the button for gall bladder and intestinal anastomosis. The first case was operated on by me June 11, 1892, for an obstruction to the common duct by a large stone. The duct was surrounded by adhesions. A cholecystenterostomy was made. The patient made an uninterrupted recovery and I was able to keep track of her health for years after. The position of obstructions are very interesting. A lady 80 years of age had 22 stones in a divertuculum of the duodenum, which produced all sorts of digestive disturbances. In one patient there was an obstruction of the ileum by two stones not larger than a hazelnut, at the site of a malignant stricture. In two there were perforations of the appendix from impacted gallstones. In two others there were large conglomerate masses of choleliths in the intestine.

While a great majority of stones of large size find their way into the intestinal tract through ulceration of the gall bladder, very large stones can and have been admitted through the common duct. One of the largest stones I have ever observed was one and seven-eighths inches in length and one and one-eighth inches in diameter. It came into the duct without a colic and was well on to the ampulla of Vater at the time it was removed. Its enormous size prevented the spasm of the duct, colic, that is usually present when small stones are passed. Coprostasis forms the key stone of the arch of symptoms of intestinal obstruction.

THE LIMITATIONS OF SURGERY IN CHOLELITHIASIS.

EMIL RICE, M. D.

(Illinois Medical Journal, Sept., 1910.)

Operations, as performed at the present time, on account of cholelithisais are usually successful as far as the primary mortality is concerned. Sepsis and hemorrhage have no greater terrors for the surgeon in this field than in most other fields of surgery. Only under special difficulties does hemorrhage threaten the success of the operation, namely, in the case of patients who are severely jaundiced at the time of the operation. Sometimes after gallstone operations we undoubtedly have to deal with real arterio-mesenterial occlusion such as is likely to follow a great variety of operations or may occur without operation. Nobody who has ever seen any cases of true arterio-mesenterial occlusion will forget the surprising quantities of blackish fluid that pour out of these patients, nor is the distention of the stomach easily overlooked, if the examination is conducted at all properly.

In case of cholelithiasis, where the liver has been damaged to any extent by the chronic disease, the anesthetic is a very serious menace to the patient's life. Complete success of operations

for cholelithiasis is jeopardized from three directions, which may be shortly characterized as: (1) the stones; (2) the infection; (3) the organs which are the seat of the disease.

In summing up, we may say that the technical part of the surgery of cholelithiasis has reached a very high and satisfactory stage of development, and that the limitations of surgical success are few, and those due more to pathalogical conditions preceding the operation than to any shortcoming to the art of surgery.

A PLEA FOR A MORE VIGOROUS CAMPAIGN AGAINST THE MALARIAL FEVERS.

BY GRAHAM E. HENSON, M. D.

(New York Medical Journal, Oct. 8.)

In this most important initial step in fighting malaria, THE EDUCATION OF THE PUBLIC ON THE MOSQUITO AS THE AETIOLOGICAL FACTOR IN MALARIA, ITS HABITS, AND HOW TO PROTECT AGAINST IT, care must be taken to explain away the many popular theories of the aetiology of the disease, remembering that but a few years ago we were ourselves harboring many of these delusions. Of special interest to the American people is the work carried on during the past few years in the Panama Canal Zone. Under the splendid leadership of Col. Wm. C. Gorgas the prevalence of the malarial infections have been markedly reduced, the number of cases ocurring annually per one thousand population being reduced from 821 in 1906 to 215 in 1909, and the deaths from seven to one for each 1,000 population. The prophylactic measures, and methods to stamp out the infection, may be classed as follows: First—the education of the public that the mosquito is the aetiological factor in malaria, its habits, and how to protect against it. Second—the destruction of the mosquito in its larval and adult stages. Third—the prevention of the development of the plasmodium in man. Fourth—the entire eradication of the parasite from an infected blood stream, with isolation of the infected individual, in so far as possible.

SHAKESPEARE'S KNOWLEDGE OF MEDICINE.

BY MAX HAHN, M. D.

(New York Medical Journal, Oct. 29, 1910.)

That Shakespeare is privileged to belong to the ancient and honorable guild of medicine has been the contention of some of the most eminent practitioners of the healing art. In 1860, Dr. Bucknill, an eminent English neurologist of that time, wrote a book on the medical attainments of Shakespeare, and it goes so far as to say that the poet was far in advance of his own time, and that his knowledge of medicine was as perfect as that of the 19th century. This has been disputed. There has been a tendency for some time, especially among the laity, to crown Shakespeare with the laurels of Harvey. But it is as undoubted a fact that he was not in advance of his contemporaries in that knowledge. Even the ancients were cognizant of some "blood flow." Shakespeare's knowledge of insanity was immense. His portrayal of Ophelia and Lear has been judged perfect by the greatest alienists. The poet knew what was known in his time of surgery. "Tenting" (probing) of wounds, packing of wounds, infection of open injuries were all known to the poet. A student of Shakespeare must inevitably become a good syphilographer. That disease which no nation wished to claim for its own, was ravaging

Europe in those days. The symptoms of syphilis as given in various parts of the dramas are, baldness (French Crowns), syphilitic affection of the bones ("Hollow bones"), sciatica, laryngeal complications, destruction of the tissues of the nose, production of impotency, rheum in the eyes, bone aches, deformities, bad smell of the body, and contagiousness not only in the brothel but also by means of drinking cups. Shakespeare everywhere evinces marked knowledge of toxicology and in certain places quite clearly describes the toxic actions of drugs. Vivisection is made mention of in Cymbeline. They were under one advantage in those days. There were no old maids and womanish bachelors who made it their lifework ("which otherwise is full of emptiness") to protest against animal experimentation. The physicians of Shakespeare's plays are uniformly kind, honest, dignified and learned. Shakespeare knew of the confidence to be reposed in the physician.

QUEER MISTAKES IN INSURANCE EXAMINATIONS.

(California State Journal of Medicine.)

If the doctor is to believe all the statements made to him by applicants for life insurance, certain families have been distinguished by their strange happenings. The *British Medical Journal* selects a few of the most amusing from a large series of blunders:

"Mother died in infancy."

"Father went to bed feeling well, and the next morning woke up dead."

"Grandfather died suddenly at the age of 103. Up to this time he he bid fair to reach a ripe old age."

"Applicant does not know cause of mother's death, but states that she fully recovered from her last illness."

"Applicant has never been fatally sick."

"Father died suddenly; nothing serious."

"Applicant's brother, who was an infant, died when he was a mere child."

"Grandfather died from gunshot wound, caused by an arrow shot by an Indian."

"Applicant's fraternal parents died when he was a child."

"Mother's last illness was caused from chronic rheumatism, but she was cured before death."

THE PRESENT STATUS OF ANTI-TYPHOID INOCULATION.

(The Journal of the American Medical Association, Oct. 1, 1910.)

GEORGE H. R. GOSMAN, M. D.

(Major, Medical Corps, U. S. Army, Washington, D. C.)

Antityphoid inoculation has been very thoroughly studied since 1896, when Pfeiffer did the pioneer work in it.

During the past year at the Massachusetts General Hospital, there was carried on a series of inoculations under the direction of Spooner. He employed as a test of his results, not only the diminished amount of fever among the inoculated, but also a determination of the immune substance in the blood, using the agglutination test to do so. His results were so encouraging in his first series that he called for volunteers among the nurses and ward attendants, determined to make an effort to stamp out typhoid among the hospital attendants. A large number volunteered. Spooner inoculated nearly one hundred people to January, 1910, made a careful study of their inoculations, and had not a single bad result and only a few severe reactions. Though the reactions among the nurses as a rule were

almost nothing, and the suffering and inconvenience among the majority almost *nil*, they all said they would have taken the inoculation anyway, with the hope of the immunity it held forth. This is a matter of considerable importance, because one of the things that hold people back from taking antityphoid inoculation is that they think they are going to suffer a great deal and have a very sore arm, as sometimes occurs in smallpox vaccination; but the fact that in the army we have now vaccinated over 8,500 people, is surely sufficient evidence that the procedure is harmless, and when I have shown that none of them have developed typhoid fever, while living all over the United States, even the most skeptical person ought to be convinced of the great value of these inoculations. And now the most important fact of all, in reference to this last series of cases, is that Spooner has lately written that this is the first year that no typhoid fever has originated in the Massachusetts General Hospital. Now it would seem, and I believe, that we can eradicate typhoid fever as it occurs among the nurses and attendants of all institutions. Think what a great thing that would be!

"CELESTIAL" SURGERY.

BY JOHN KNOTT, A. M., M. D., Ch. B. AND D. P. H. (Univ. Dub.); M. R. C. P. I., M. R. I. A.; etc.
(Dublin, Ireland.)

The recent awakening of the Celestial empire divides the general geographical, ethnological, and imperial interests and prophetic curiosity of this preliminary decade of the nineteenth century, with the opening up of the interior of the dark continent.

The universal experience and observation of Western physicians who have visited the Celestial empire, and given the results of their travelled enlightenment to the world, go to prove that China has always persisted in displaying, in her surgical as well as in her social and political (and various other intellectual) practices, the same unchanging routine which hopelessly excludes improvement.

The uterine speculum, the midwifery forceps, and the urethral catheter have remained unknown luxuries of surgical practice in the Celestial empire—and are, even now, to be seen only on the narrow fringe which has been contaminated by the presence of the pale-faced intruder. Small leaden bougies have, however, been in general use for the purpose of counteracting the tendency to cicatricial atresia of the urethra in the members of the semi-martyred army of eunuchs. This numerous—and highly representative—section of the Celestial community owes its existence to a special imperial privilege; which has never been accorded to more than *some* members of the imperial family, in addition to the reigning Emperor himself. The latter has long been accustomed to own, nominally at least, an attendant battalion of 3,000 eunuchs. The princes and imperial princesses were accorded the right to thirty each; the nephews and younger children of his imperial majesty to twenty; the royal cousins to ten. The representative descendants of the eight Manchu princes who aided in the original foundation of the reigning dynasty are also privileged to possess ten eunuchs each. The privileges of the position in all of these cases are so well assured, and the struggle for existence of the members of the swarming population is so great—even overwhelming in its exactions—that boys are sold by their parents, and even young married men are found to offer their own persons, for the operation of emasculation, and consequent

profession of eunuchism. No anaesthetic is used!—the imperturbable "Chinee" would not dream of taking advantage of it. The patient is bound on a structure somewhat resembling a European camp bed; his shoulders are firmly held by one assistant, while his thighs are held apart by two others. The operator grasps the root of the penis with the scrotum in the left hand, and proceeds to compress and twist them, so as to expel as much of the blood as possible. When this preliminary stage of the procedure has been effected, he asks the final question—of the parents when the patient is a boy: "Do you consent?" When the answer is in the affirmative, he instantly removes with one sweep of the knife the penis and scrotum (including, of course, the contents of the latter)—making the section as close as possible to the puboperineal surface.

The fact is worthy of passing notice, in concluding this sketch of a strangely conservative surgical system, that Mongolian medicine had anticipated the suggestion of the late Professor Brown-Sequard by untold centuries, in prescribing the testicles of rams to elderly men who were ambitious to reinforce their evanescent sexual energies. Also that the employment of mercury in syphilis had been familiarly known, and thoroughly appreciated, in those vast and remote regions of teeming humanity. Curiously enough the slant eyed Oriental is afraid to take the uncanny metal internally; so that it has been habitually utilized by application to the skin. So that even the imperturbable Mongolian may be found to inherit some therapeutic awe—of groundless origin!

VIRGINIA PHYSICIAN ON RACE SUICIDE.

(Greenville Daily News, Greenville, S. C., October 26, 1910)

PRESIDENT OF STATE MEDICAL SOCIETY STARTLES TWO HUNDRED DOCTORS WHO HEARD SENSATIONAL ADDRESS—"CONSPIRACY AGAINAT THE UNBORN."

Norfolk, Va., Oct. 25.—In one of the most sensational addresses ever heard in Norfolk, Dr. E. T. Brady of Abingdon, Va., president of the Virginia Medical Society, to-night startled 200 physicians who heard him.

"Squeamishness is never sincere and sincerity is my only excuse," said Dr. Brady. "I am aware that I am touching upon a subject unusual in a public address. If the dose seems drastic, remember that drastic measures are needed to put us in working condition.

"We must give the situation frank recognition. We are blindly following the fetish of business at the expense of fraternity.

"Even the pathetic public is recognizing the possibility of race suicide. There are exactly 350 cold blooded premeditated murders of defenseless innocents for every 600 children brought into the world. Think of it. And the large majority of these horrible crimes are perpetrated by so-called Christians and intelligent wives, who thus from their vaunted social height give an example for a doctrine of convenience and selfishness.

"Vanity, social aspirations, fashion, ignorance and fads all conspire against the unborn."

FOR TREATMENT OF INEBRIATES.

METHODS OF CURE AND TREATMENT OF INEBRIATES DISCUSSED AT INTERNATIONAL CONGRESS—STATES SHOULD CONTROL DETENTION OF DRINK VICTIMS—IS DRUNKENNESS A CRIME OR A WEAKNESS?—CARING FOR DEPRAVED CHILDREN—THE PRISON SYSTEM IN FRANCE AND ITS EFFECT ON CRIME.

(The News and Courier, October 5, 1910.)

Washington, October 4.—Public institutions for inebriates are advocated by the International Prison Congress. Experiments conducted in several countries during the last ten years have demonstrated the success of establishments of this character and the Congress at to-day's sessions placed itself on record as favoring their extension. The Congress also adopted resolutions recommending that prisoners be allowed payment for their work and that any sum of money credited to them in such manner should be available to their families in time of need.

A complete and careful investigation into the subject of caring for mentally defective children with dangerous moral tendencies is provided for in another resolution adopted.

Spirited discussion of the treatment of inebriates marked the section meetting at which the resolution adopted by the Congress was drawn.

TREATMENT OF INEBRIATES.

The opinion was expressed by J. S. Gibbons, inspector of Irish prisons, speaking for the section that it was desirable to further extend this kind of detention of inebriate criminals under State control, with a view especially to arresting the drink habit in the early stages and to the avoidance of useless and repeated sentences to imprisonment. The Congress endorsed the decision of the section without discussion.

A CRIME OR A DISEASE?

The question whether drunkenness was a crime or a disease was debated at great length at the section meeting. Edwin Mulready, of Boston, said the short sentence in jail and the treatment of the drunkard as a criminal was a failure.

The foreign delegates were the guests of the American Prison Association at a banquet to-night at the New Willard Hotel.

Prison labor in France was the subject of a lecture by M. Schramack, director of the French prison system. He said France had employed prison labor since 1789 and that only one effort had been made to do away with it. Two systems—the State use and the contract—were in vogue, he said, the tendency being toward the former.

CLEMENCY IN FRANCE.

M. Schramack declared that the number of prisoners in France had fallen from 50,000 to 25,000 during the last five years through utilization of the suspended sentence and conditional liberation. He emphasized the fact that great attention was being paid in France to the placing of delicate children in families instead of confining them in public institutions.

The National Prisoner's Aid Society was organized here to-day by a group of thirty delegates to the American Prison Association. E. F. Waitt, of Minneapolis, was elected president.

ANDERSON PHYSICIANS INDORSE ORDINANCE.

SELLING OF MILK TO BE REGULATED BY LAW SIMILAR TO LAWS OF FEDERAL GOVERNMENT.

(The State, Columbia, S. C., October, 7, 1910.)

Anderson, Oct. 5.—At the regular monthly meeting of the Anderson County Medical Society, a general discussion of the proposed ordinance regulating the milk supply of the City of Anderson was had, and the Society

went on record as heartily indorsing the ordinance.

Two or three months ago city council adopted an ordinance regulating the milk supply, and this ordinance became operative on September 1. Operation of the ordinance was suspended soon after that date in order that the local board of health might submit an ordinance less drastic, and in order that the dairymen might have more time to comply with its requirements.

Dr. Wm. C. Hamilton, the meat and milk inspector, is the author of the proposed ordinance, which will be presented by the board of health to city council next Tuesday night for consideration, The ordinance provides for the construction and maintenance of dairy houses, pastures and the marketing of the milk and is patterned after the laws of the federal government.

DISEASELESS, BUT STUPID.

PROFESSOR OF MEDICINE GIVES FORECAST CONCERNING FUTURE MAN.

(The State, Columbia, S. C., October 6, 1910.)

The man of the future will be a sane, diseaseless, sturdy, stupid creature—when science shall have robbed the world of both disease and genius. Such was the picture drawn by Dr. William G. MacCallum, professor of pathology in the Columbia University College of Physicians and Surgeons. He was speaking at the opening of the school year of the institution, and 300 students listened to him with frequent applause. His subject was "The Future of Medicine." "All diseases, except those due to accidental causes, such as burns, poisonings, cuts, etc., would be entirely eliminated," he asserted.

"In the study of diseases," said he, "we have made the most progress up to date, but in the cure of disease we have made little, with a few brilliant exceptions, including yellow fever.

"All insanity in time will be stamped out with the exception of that resulting from imprudence and intemperance, which always will exist, as they are the price of a man's personal liberty.

"It is a crime that any hereditary burdened individual or a weak-minded, should be permitted to marry and have children. I read foolish sentimental reports of the wonderful work done for such persons in schools provided for them. They marry and have children, and they marry often other weak-minded persons, and this is the flagrant crime, for the offspring almost surely will be only a burden to the State and to themselves. These vessels, spoiled in the making, should never have been let out of the institution where they are so successfully taught, or, if they are, precautions should be taken by law against their marrying."

STATE HOSPITAL SELECTS ITS SITE FOR THE NEGRO PATIENTS.

SEVERAL BUILDINGS WILL BE ERECTED AT ONCE—DETAILS OF THE TRANSFERS GIVEN LATER.

(The State, Columbia, S. C., October 8, 1910.)

The new State Hospital for the Insane will be located about six miles from Columbia on the Southern and Seaboard Air Line Railways, between the Asylum and Koon roads. The site contains 2,000 acres and is made up of several tracts of land belonging to a number of individuals, whose names have not been announced by the commission. The average price paid for the land is $25 per acre, which means an outlay of approximately, $50,000. This announcement was made yesterday, following a long session of the asylum commission.

The members of the asylum commission are: Dr. J. W. Babcock, superintendent of the State Hospital for the Insane; Dr. Robert Wilson, chairman of the State board of health, Charleston, Judge R. O. Purdy, Sumter; Leroy Springs, Lancaster; Dr. George B. Cromer, Newberry. The commission has held several hard-working sessions since the first of the year. The site in Richland County was selected out of over 50 offers made from many sections of the State. The new site is to the north of the city and is, therefore, only about five miles from the old institution.

There are several details to be worked out by the commission before the names of the owners of the several tracts making up the site are announced. The land is in the sand hills.

It was announced by the commission that the work of erecting the new buildings on the site would commence as soon as possible and rapidly pushed to completion.

Several weeks ago, Dr. Babcock. speaking for the commission, said that the new site would be first used for the more serious cases of negro patients. There will be several buildings erected. All buildings, according to members of the commission, will be erected with a view to an enlargement of the scheme.

At the last session of the legislature there was a concurrent resolution passed providing for a commission to make plans and provisions for the relief of the congested conditions at the State Hospital for the Insane. In the resolution the sum of $100,000 was named to be used in making the improvements. This sum is to be borrowed from the sinking fund commission to the credit of the State, and has already been set aside.

Before appointing the commission Gov. Ansel studied the act very carefully and came to the conclusion that its terms were very liberal and that as much money might be borrowed as would be necessary to make the improvements. He did not think that all of the money should be borrowed in one year, but from time to time as it might be needed. Half of the $100,000 named in the resolution will be required to pay for the new site. There are certain improvements being made at the old State Hospital for the Insane which will take a large amount of the remaining $50,000. This would lead to the conclusion that before the work of improvement is completed much more than $100,000 will be required. The work of improvement will be made gradually and may require several years.

A STRONG COMMISSION.

The commission named by Gov. Ansel to take charge of the improvements of the State Hospital for the Insane is considered one of the very strongest bodies ever appointed in this State. The members are all strong men in their different professions. They have spent much time in working out the scheme of improvement and have made the very best selection possible.

The new site may be in 20 years the permanent home of the State Hospital for the Insane. Several days ago Dr. Babcock gave the opinion that the institution would be eventually driven from Columbia on account of increasing population.

DR. JESSE CLEVELAND HURT.

TRAIN KILLS HORSE, DEMOLISHES BUGGY AND INJURES OCCUPANT.

(The News and Courier, Charleston, S. C., October 13, 1910.)

Spartanburg, October 12.—Special: The escape from instant death this morning of Dr. Jesse Cleveland was

almost miraculous. He was driving across the tracks of Southern Railway on Forest Street, when north-bound train No. 42, travelling at a pretty lively clip, struck the vehicle, completely demolishing it, throwing Dr. Cleveland, the sole occupant, several feet from the track and injuring the horse to such an extent that it was necessary to kill it.

Houses are built close to the track alongside the sharp curve around which the train was approaching, and it was not possible to see very far up the track. The engine struck the buggy at the front wheels, the horse running away on one side of the track while the buggy and Dr. Cleveland were knocked on the other. The injuries to Dr. Cleveland are very painful, but it is not thought that they are serious. There is a big cut in his head, and unless complications set in, the physicians think that he will be all right in a short while.

Dr. George R. Dean, who attended him, said to-night that he could not tell how badly he was injured.

Dr. Cleveland is one of the most prominent citizens in Spartanburg. He is president of the Tucapau Cotton Mills, and is connected with a number of other leading business enterprises.

DR. W. J. BURDELL APPOINTED MEDICAL SECRETARY OF SOUTHERN DIVISION.

(The News and Courier, October 10, 1910.)

It was announced yesterday by Mr. Virgil C. Dibble, of this city, counsellor of the Southern division of the Esperanto Association of North America, that Dr. W. J. Burdell, of Lugoff, who is well known as a member of the State board of health, had been appointed medical secretary for the Southern division of the Esperanto Association. Dr. Burdell is an enthusiastic Esperantist, a member of the Universal Esperanto Physicians Association and a sustaining member of the Esperanto Association of North America. His acceptance of the office of medical secretary is expected to strengthen greatly the cause of Esperanto with Southern physicians.

CONDUCT CLINIC ON PELLAGRA.

TWO IMPORTANT CONFERENCES TO BE HELD THIS WEEK.

(The State, Columbia, S. C., November 3.)

Dr. C. H. Lavinder, past assistant surgeon of the United States public health and marine hospital service, will arrive in Columbia on Monday from Washington. On Wednesday and Thursday afternoons he will conduct a clinic on pellagra at the State Hospital for the Insane, under the auspices of the State board of health. This announcement was made yesterday by Dr. J. W. Babcock, superintendent of the State Hospital for the Insane, as a result of a letter received from Dr. Lavinder.

All of the physicians of the State interested in the study of pellagra are invited to attend the clinic. An investigation of the disease will be held. The clinic will be held at 3 o'clock each afternoon. The cases of pellagra at the State Hospital for the Insane will be used for the investigation.

Dr. Lavinder recently returned from Italy, where he has spent four months in the study of the disease. He was for a time stationed at Columbia. The pellagra hospital at the State Hospital for the Insane is under the direction of the government and can only be used by physicians in this State.

It is thought that as a result of the clinic an invitation will be extended to the next national pellagra conference to meet in Columbia.

DEATH OF DR. F. M. MONROE.

SOLDIER, PHYSICIAN, CITIZEN, BENEFACTOR OF MANKIND—AGED 71.

(The News and Courier, October, 27, 1910.)

Latta, October 26.—Special: Dr.F. M. Monroe, one of Latta's oldest and most respected citizens, died at his home here Friday morning at 8 o'clock. For a number of years he has been in declining health and his death came as no surprise to his family and friends. He gave up the practice of medicine and active life about five years ago, and spent the last years of his life at home, seldom coming the short distance of one-half mile to town. He has had several serious spells of ill health in these last few years, in which his life almost hung on a thread, but he bravely survived them all. He was confined to his bed about two weeks ago, and being worn out in body and strength at the age of 71 he expressed the desire that he had rather die than live on a few years in declining health.

His body was laid to rest at the cemetery, Saturday evening at 3 o'clock, in the presence of his family and friends, with only a short burial service, according to his request.

Dr. Monroe was born on the 25th of January, 1839. At the age of 15 he attended the State Military School, in Columbia, only a short time, and then went to Yorkville to be with his older brother, J. C. Monroe. He entered the Coward-Jenkins Millitary School there and remained two years. Leaving Yorkville he went to Laurinburg, N. C., where he attended the high school, studying Latin and French, preparatory for the study of medicine. A few years later he entered a medical college in New York, where he studied medicine two years, leaving there during the John Brown raid, when all Southerners left New York. From there he went to Charleston, and entering the Charleston Medical College, he completed his study of medicine in 1860. The following year he practiced at Marion. He enlisted in the army at the outbreak of the war the same year, but was taken sick and did not go with his regiment. About a year later he enlisted in the army and went to Arkansas. He was in Price's army. On their march, through Missouri being engaged in the battles of Fort Smith, Iron Mountain and others not known to the writer. He was aide-de-camp, ranking as captain. At the close of the war he returned home and moved from Marion to this vicinity, living where Sardis Church now stands and began practicing. In the year 1874 he moved to where he was living at the time of his death. He was engaged in the mercantile business here, and also in farming, but the greater part of his time was spent in his profession.

Dr. Monroe has left his mark on so many of the things that stand for good that he can truly be said to have a monument stamped in the progress of his community. In the town's early days he was at the head of every religious, social and educational movement that had for its purpose the benefiting of mankind. He was the promoter and financier of the first church in town, giving freely of his means and time. He has left his family a home surrounded by acres of valuable land, showing his thoughtfulness as a loving husband and father.

But the greatest remembrance the people have of him is his service to mankind in the practice of his profession. He used it not so much for his own personal gain, but that suffering humanity might be relieved of some of the wages of sin. He was for a long time the only physician in his community and many was the time he disobeyed the laws of nature in sleep and rest that he might be of service to those afflicted. He practiced for both rich and poor with the same untiring effort, conscious only of the

fact that he was helping his fellow-man. A host of friends extend their sympathy to the bereaved family.

Dr. Monroe is survived by a wife, who was Miss Caroline Lewis, and several children as follows: Mrs. J. G. Baker, of Latta; Mrs. S. W. Epps, of Kingstree; Mr. M. M. Monroe, a prominent merchant here, and Misses Bettie, Danie and Mary Monroe, who were living with him.

DOCTORS DISCUSS PELLAGRA.

MUCH MORE HOPEFUL VIEWS ARE HELD THAN WERE EXPRESSED AT THE LAST CONFERENCE.

(The State, Columbia, S. C., September 23, 1910.)

The doctors in attendance at the pellagra clinic in the amusement hall at the State Hospital yesterday were called to order promptly at 3 o'clock by State Health Officer C. F. Williams, who stated that the meeting was held at this time because of the continued interest in the subject on the part of the medical profession. After announcing that the meeting was to be altogether informal and extending a cordial invitation to all present to take part in the discussion, Dr. Williams introduced Dr. C. F. Lavinder of the United States public health and marine hospital service, who has recently returned from Italy where he spent four months studying pellagra. Dr. Lavinder said that the Italian and American disease are one and the same, but that our type is much more severe. The Italians are for the most part strongly committed to the theory that spoiled corn is the cause of the disease. They treat the disease along the same lines as is done in this country, some form of arsenic being fairly commonly used. In Dr. Lavinder's opinion, the disease is very hard to diagnose without the presence of the skin symptoms. He also deplored the gloomy views taken of pellagra by the public generally and thought that physicians should endeavor to allay the unjustifiable pessimism that prevails about the disease.

Dr. Lavinder said that so long as the cause of the disease remained unknown, it was impossible to make definite denial as to communicability, but all known facts were opposed to the contagiousness of the disease. In Italy such a view is never entertained. In Italy pellagrous hospital nurses and attendants have never been known to develop the disease, although in intimate daily contact for years with all types of pellagrins in large numbers.

Dr. Young, of Rock Hill, discussed the question of the relation between amebas and pellagra and strongly suggested a casual role for these intestinal parasites.

Interesting cases were reported and remarks made by Drs. Brasington, Furman, Lancaster, Maddox, Watson, Babcock, Williams and others.

On the whole, a very hopeful view seems to be entertained by most of the speakers as to the curability of pellagra—in marked contrast to some of the views held a year ago at the conference held here at that time.

About a dozen cases of pellagra were shown in the hall and several others in more advanced stages in the wards.

The impression seemed to prevail among the doctors present that an invitation should be extended to the National Conference of Pellagra to hold its next session in Columbia next June.

Another clinic will be held this afternoon at 3 o'clock at the State Hospital for the Insane.

About 50 physicians from all parts of the State were in attendance. Among those who registered were:

A. S. Todd, Manning; Theodore Maddox, Union; S. T. D. Lancaster, Pauline; Wm. H. Delk, Greenville; J. D. Connor, Smoaks; F .B. Gunter,

Batesburg; Wade Woodward, North Augusta; J. C. Folk, Brunson; T. M. DuBose, Columbia; S. E. Harmon, Columbia; F. W. P. Butler, Columbia; L. H. Irby, Woodruff; E. H. Wyman, Estill; A. M. Redfern, Clemson College; John Lunney, Darlington; G. A. Hennies, Charleston; Ernest Cooper, Columbia; J. J. Watson, Coulmbia; J. B. Selzter, Newberry; J. H. Pratt, Morrisville; W. J. Burdell, Lugoff; F. G. James, Greer; R. W. Gibbes, Columbia; F. A. Smith, Mullins; J. P. Ott, Columbia; W. G. Houseal, Newberry; R. A. Lancaster, Columbia; J. A. Martin, Spartanburg; W. S. Jennings, Orangeburg; J. W. Tarrant, Lynchburg; T. B. Duckett, Fountain Inn; Davis Furman, Greenville; T. G. Croft, Aiken; W. P. Timmerman, Batesburg; L. C. Brooker, Sewanee; E. B. Saunders, Columbia; J. L., Thompson, Columbia; B. F. Sloan, Walhalla; S. F. Brasington, Camden; A. M. Brailsford, Mullins; J. W. Payne, Greenwood; S. G. Miller, Chester; J. W. Page, Anderson; C. D. Rollins, Lake City.

A PHYSIOLOGIC BINDER

(The Medical Brief, Aug. 1910.)

The latest medical concept of ptosis is that of a functional habitus, of which the various organic prolapses, such as gastroptosis, enteroptosis, nephroptosis, and the rest are end results. This broad functional concept gives an added interest and value to those mechanical appliances which, based on physiological principles, seek to correct and hold in check the vicious enteroptotic habit, thus preventing functional compromise of the organs concerned, or, if already compromised, restoring them to a favorable position for functional rehabiliation. The truth is, with the modern scientific physician only that form of binder will survive which measures up to this concept of abdominal ptosis.

It is because the Storm binder has forestalled this concept and fulfills its physiologic demands that it ranks as a prime favorite with both physicians and surgeons—for in post-operative cases, hernia, pregnancy and the like, the underlying principle is the same, and the details of the binder are such as to readily adjust themselves to the several states.

Even in the matter of material the various conditions that one encounters are amply provided for. The linen mesh (the most expensive $10 binder) is firm, close-woven, yet with a "porosknit" effect, and is decidedly the best where it can borne. But, as every physician knows, there are among these ptotic patients a large percentage of nervous, delicate individuals who cannot tolerate the irritation of the linen mesh, and for such the $8.00 silk binder is just the thing. It must not be forgotten, moreover, that one finds such patients among the less well-to-do, whose idiosyncrasies must nevertheless be considered; for these the maker has put up a half-silk binder for $6.00 which meets the situation nicely. Then there is the cheaper $5.00 binder for folks who cannot afford more, which has all the essential efficacy of the more expensive makes.

With such physiologic qualities and such a convenient range of accommodation, the Storm binder deserves the popularity it enjoys.

THE HYPODERMATIC TABLET AS AN EMERGENCY AGENT.

If there is one class of therapeutic agents which more than another should be chosen with discretion and judgment, the hypodermatic tablet represents that class. When he administers

a preparation hypodermatically the physician wants prompt action, and he wants to be certain that he is going to get it. To have that assurance he must use a tablet that is active, that has definite strength, that dissolves promptly and wholly. Cheap tablets, poorly made tablets, tablets concerning which there is the slightest doubt as to medicinal quality, may well be left alone. And there is no need to err in the matter of selection. Hypodermatic tablets of the better sort are easily obtainable. Perhaps the brand which comes most readily to mind is the brand which is exploited so extensively to physicians under the familiar caption of "Five Seconds by the Watch." The makers, it is hardly necessary to add, are Messrs. Parke, Davis & Co., who guarantee their hypodermatic tablets unequivocally as to purity, solubility, activity and stability.

AN UNCONVENTIONAL COUGH SYRUP.

There are "cough syrups" without end. Some of them, it is needless to say, have little or no therapeutic value. Conversely, there are some that no physician need hesitate to prescribe. One of these—Syrup Cocillana Compound (P. D. & Co.)—is so exceptional in many particulars as to be worthy of special mention just now, when coughs are so plentifully in evidence. By its name no one would recognize it as a preparation for "coughs" and "colds," and this, in connection with its general efficiency, constitutes one of its chief claims to distinction. It is a product which the layman knows nothing about. It does not encourage counter-prescription or self-medication. It was designed especially with reference to the needs of the prescriptionist.

The formula of Syrup Cocillana Compound, which of course is plainly printed on the label, is quite unusual. Let us briefly consider its components: Euphorbia pilulifera—serviceable in the treatment of chronic bronchitis and emphysema; wild lettuce—a mild and harmless narcotic, useful in spasmodic and irritable coughs; cocillana—valuable expectorant, tonic and laxative, exerts an influence on the respiratory organs similar to that of ipecac; syrup squill compound—serviceable in subacute or chronic bronchitis, as an expectorant, and as an emetic in croup; cascarin—the bitter glucoside of cascara sagrada, useful for its laxative action; heroin hydrochloride—a derivative of morphine and extensively prescribed in the treatment of cough, especially of bronchial origin; menthol—stimulant, refrigerant, carminative and antiseptic, serviceable in coughs of pharyngeal origin.

Syrup Cocillana Compound would seem to be worthy of extensive prescription.

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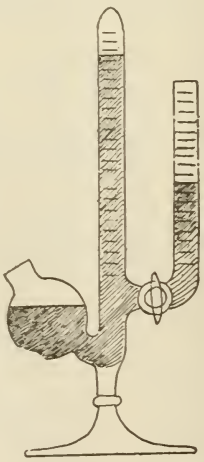
FLORENCE, S. C.

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MEDICAL AND SURGICAL CASES : :

UNDER THE CARE OF

F. H. McLEOD, M. D.

NURSES TRAINING SCHOOL
RESIDENT PHYSICIAN



WATCH THE
UREA INDEX

A SMALL ELIMINATION OF UREA WILL GIVE SYMPTOMS VARYING FROM A SLIGHT HEADACHE TO UREMIC CONVULSIONS.

IN BRIGHTS and other CASES of NEPHRITIS The UREA ELIMINATION CAN BE RAISED BY THE USE OF

NEPHRITIN

IF INTERESTED
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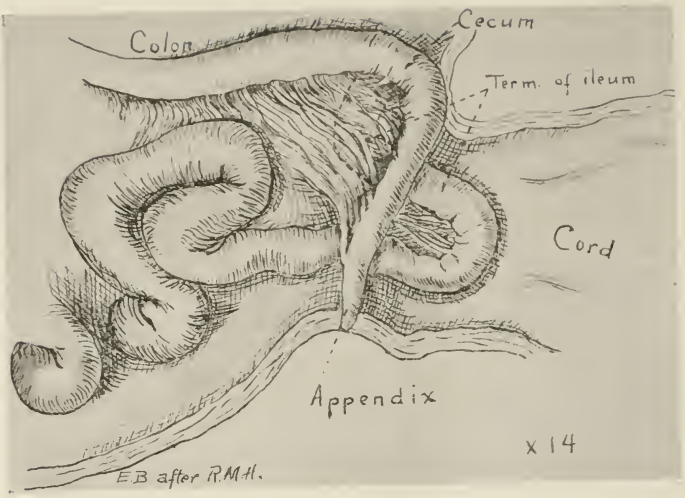


Figure I.

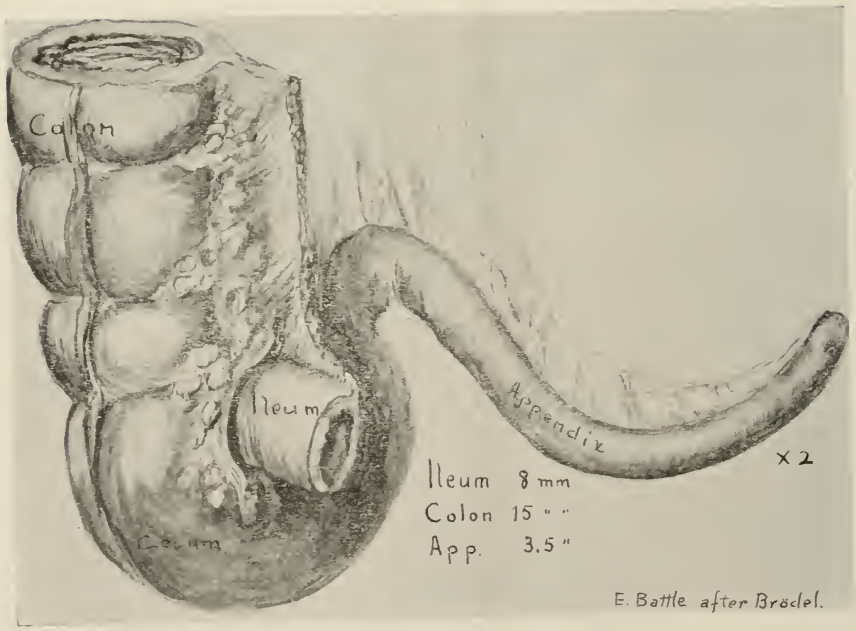


Figure II.

The Journal of the South Carolina Medical Association.

Published Every Month Under the Direction of the Board of Councilors.

OFFICE OF PUBLICATION, CHARLESTON, S. C.

Application for second-class matter at Charleston, pending.

ANNUAL SUBSCRIPTION, $2.00. **J. C. SOSNOWSKI, Editor.**

VOL. VI. DECEMBER, 1910. No. 12

The Journal is published monthly under the auspices of the South Carolina Medical Association. Original Articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings, and items of news that may be of interest to the profession, to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 5th of each month.

Proofs of all Original Articles appearing in the Journal are revised and corrected by their authors. The Journal is in no sense responsible for expressions in Original Articles.

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JOURNAL S. C., MED. ASS'N., CHARLESTON, S. C.

APPENDICITIS IN CHILDREN.

A Practical Study.*

BY JOHN WESLEY LONG, M. D., GREENSBORO, NORTH CAROLINA; EMERITUS PROF. DISEASES OF WOMEN AND CHILDREN, MEDICAL COLLEGE OF VIRGINIA.

I come not with the music of oratory or the seductive words of the politician, but to have a heart to heart talk with you, on certain phases of appendicitis as it occurs in children; a subject of quite as much interest to the physician, as to the surgeon.

Frequency.—As the Holy Nazarene said of the poor, "ye have them with you always" (Mark, 14:7), so it may be said of appendicitis; for certainly it is the most common, serious surgical affection that we see now-a-days; holding as it does a prominent place in the case records of every practitioner.

You will all readily admit the truth of this assertion, in this good year of 1910, but, per contra, its repetition recalls a statement made by the late Dr. E. Burke Haywood, who in his day was recognized as one of the ablest physicians in North Carolina. He said in discussing the first paper I ever read on appendicitis, (1893) that in forty years' practice he had seen *only one* case of appendicitis; and in that instance the patient recovered without operation. I had just reported five operations for appendicitis; and while the old doctor narrated his experience, with all the dignity and courtesy of a Chesterfield of the ancient school,

*Read before the Guilford County Medical Society, N. C., Sept., 1910, and before the Marlboro County Medical Society, S. C., Oct., 1910.

his pronouncement was delivered with the finality of a Supreme Court decision—however, he made haste to invite me to dine with him. Verily, our vision has been clarified since that day!

I have operated on patients with appendicitis, at all ages from three to seventy-two years, but the most vulnerable age is from five to twenty-five years. Deaver says more cases occur from the tenth to the fifteenth years. The increasing number of cases in children, from five to seventeen years old that come under my care convinces me of its great frequency in childhood and adolescence. In studying the ages of the last two hundred patients, on whom I have operated for acute appendicitis, I find in the first hundred, fifty-five patients from five to twenty-five years old; and in the last hundred, sixty-seven from three to twenty-five years, making an average of sixty-one per cent. occurring in children and young adults, against thirty-nine-per cent. for the remainder of life. Of course, I would not even suggest that such small statistics be taken as a criterion, nor have I made any attempt to tabulate all the cases of appendicitis occurring in children that I have operated on, but have given just enough to indicate the relative percentage of cases of appendicitis in children and adults as found in my practice. I am as fully convinced that there is a period when we are more vulnerable to appendicitis, as there is a time when we are more susceptible to the so-called infantile diseases.

There are a number of reasons for the greater frequency of this disease in the young as compared with the old, one of which is the

Embryology.—These remarks as to the embryology of the appendix are based principally upon Kelly's study of Mall and Brodel's fifty fetal specimens, and the illustrations are redrawn and modified after the same authority.

By the end of the first month of intra-uterine life, the alimentary tract which primarily was a straight tube, has been largely pushed out of the abdomen, for lack of room, into the open umbilical cord. At the fifth week the cecum begins to develop; by the eighth week the transient appendix has developed and disappeared, most of the intestines have receded into the abdomen, the large bowel has begun to differentiate from the small and the upper portion of the cecum shows a slight bulging which distinguishes the cecal portion proper, from the distal portion, which from now on is called the appendix, (Fig. I.). In many of the lower animals, especially the carnivora, the cecal-pouch persists and there is no appendix.

By the end of fetal life there is a further differentiation between the cecum and appendix. The appendix continues to grow until adult life, though relatively less rapidly than does the alimentary canal as a whole. At birth the length of the appendix, as compared to the whole intestine, is 1-71 while at fifty years it is 1-115. And what is true of its length, is pre-eminently of its size. Fig. II. shows the relatively large and long appendix of an eight months old child. After middle life there is normally a tendency to atrophic involution.

Clinically, we are familiar with the huge appendix found in children; and in addition to its dimensions it looks plethoric and juicy. Whoever saw an atrophied appendix in a child? It is always full-fledged, and usually working over time.

Unquestionably, if the appendix has a function, it must be during its stage of active growth and while its rich blood and lymphatic supply are at their height. Advancing age with its atrophic changes means a lessened blood supply, functional decline and a diminished lymphatic circulation. Therefore, from every standpoint, em-

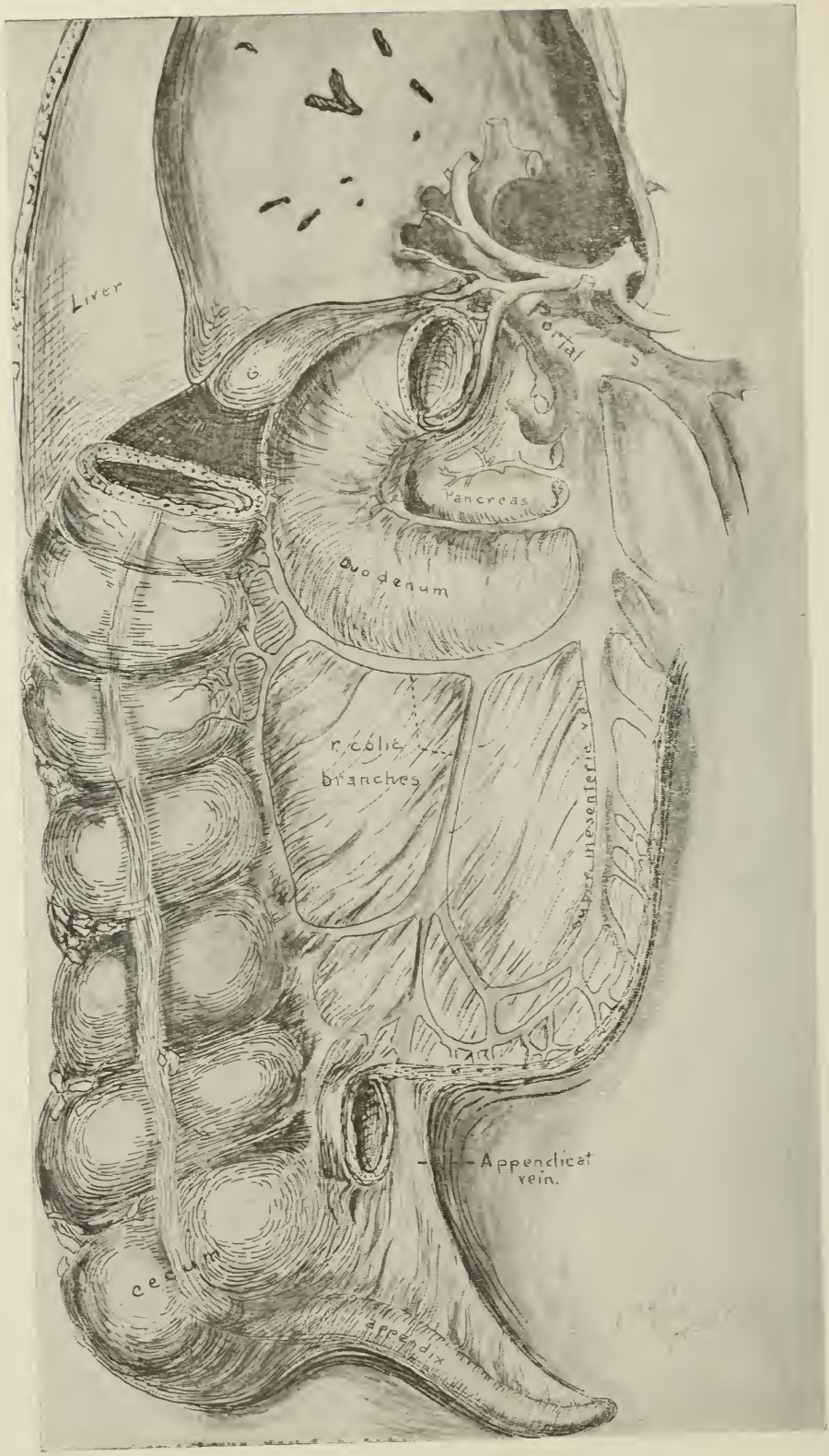

Liver
G
Portal
Pancreas
Duodenum
r. colic
branches
Appendicat
vein.
Appendix

Figure III.

bryological, anatomical, functional and clinical, we are justified in asserting that children and young adults are much more susceptible to appendicitis than are older people.

Symptoms.—You are as familiar with the text-book symptoms as I am, so why should I repeat them here. But there is one symptom that is often overlooked, rather I should say its significance is not properly interpreted; namely:

Acute Indigestion.—By the term acute indigestion is meant marked gastric distress, usually with nausea and vomiting. The condition is sometimes spoken of as a "fit of indigestion," "biliousness," "cramp colic," or the "liver out of fix." Indigestion is very common in children and adolescents Beyond the age of thirty years, other factors come into play and an attack of so-called acute indigestion is more suggestive of gall-blader trouble as a rule than it is of appendicitis. Moreover the correlation of symptoms determines the differentiation. These attacks, if pronounced, almost invariably have a physical basis, which is sometimes in the stomach itself, but much more frequently it is found lower down in the alimentary canal and, in the young, ordinarily it may be located in the appendix. Of course, I speak in general terms.

Mayo says the only way the intestines have of expressing themselves when in distress is to "holler through the stomach." Surgeons have long since come to regard a stomach crisis as indication of trouble further down in the digestive apparatus. I cannot emphasize this relation too strongly; True we may have profound stomach disturbance from gastric ulcer, or growth, or inflammation, or fermentation, but in every instance it is up to the physician to prove that the "causus belli" is in the stomach and not in the intestines. Also, we must exclude the stomach manifestations of the first and second Summer diseases, the initial stage of the acute, contagious, toxaemias, etc.; but the fact remains that acute stomach symptoms in the young mean trouble with the appendix in a large percentage of cases. Of course, many cases of appendicitis develop without any stomach symptoms whatever, but the relation is so common that the observing doctor cannot fail to take cognizance of it.

I lay it down as a rule, to which there are few exceptions, that the young person who has a *fit of acute indigestion* is a *suspect.*

I take this word "suspect" from the annals of criminology and give it a dignified place in the archives of pathology.

If the attack be accompanied by pains playing about the umbilicus and darting to and fro from the right iliac fossa the suspicion becomes a probability. Should the attack be followed by soreness and tenderness in the appendicular region, the probability becomes a *certainty* in at least ninety-nine per cent. of cases. If in addition there be fever, muscular rigidity and flexure of the right leg, a blind man can see the morbid process. However, the point that I am trying to stress just now is the *tremendous significance of acute indigestion as the initial symptom of appendicitis*, inaugurating, as it were, a train of symptoms that in the end is so definite that even the most prejudiced cannot fail to recognize the relation between cause and effect. Therefore, it behooves us to appreciate the importance of the initiatory gastric symptoms and be governed accordingly.

Beginning with the stomach manifestations, the successive appearance of the symptoms of appendicitis and its sequelae, make such a perfect crescendo that it is interesting to observe the scale. It goes something like this: By-the-way, it seems so appropos to mention the treatment which is

usually practiced, when the surgeon is not called, that I will let it follow each group of symptoms as a refrain.

I. Indigestion, as evidenced by gastric distress, nausea and vomiting.

Refrain.—Calomel, in broken doses !

II. Indigestion with pains about the umbilicus, and in the right iliac fossa.

Refrain.—An opiate !

III. Indigestion with pains followed by soreness and tenderness.

Refrain.—The ice bag !

IV. Indigestion with pains, soreness, tenderness and accompanied by fever.

Refrain.—Fever mixture !

V. Indigestion with pains, soreness, tenderness, fever and muscular rigidity.

Refrain.—Hot poultices !

VI. Indigestion with pains, soreness, tenderness, fever, rigidity and flexure of the right limb.

Refrain.—Liniments applied to leg and "side" !

VII. Indigestion with pains, soreness, tenderness, fever, rigidity, flexure and constipation more or less obstinate.

Refrain.—More purgatives and injections ! Oh, how we pour them in at this stage of the game !

VIII. Indigestion with pains, soreness, tenderness, fever, rigidity, flexure, constipation and tympany. Peritonitis is now getting well under way !

Refrain.—Turpentine stupes !

IX. Indigestion with pains, soreness, tenderness, fever, rigidity, flexure, constipation, tympany and the formation of a palpable mass.

Refrain.—Tincture of iodine and blisters ! "To scatter the inflammation !"

X. Indigestion with pains, soreness, tenderness, fever, rigidity, flexure, constipation, tympany, mass, and intestinal obstruction with persistent vomiting from septic-paresis.

Refrain.—Strenuous efforts to get the bowels moved and "to get something to stay on the stomach."

XI. Indigestion with pains, soreness, tenderness, fever, rigidity, flexure, constipation, tympany, mass, and intestinal obstruction plus the symptoms of general sepsis, and other late complications, with failing heart and vital forces

Refrain.—The scene closes !

First, the symptoms.—See how the symptoms all the way through even the terminal sepsis, *hark back to the "fit of acute indigestion."*

"Oh yes," I hear you say, "of course, if you put it that way the connection seems clear." Well, I want to tell you, my friends, that I have put it right, and furthermore, there is no one symptom of the entire group of more significance than is the acute indigestion. I ask you to take this mental picture of the correlation of symptoms home with you and if I say nothing else that impresses you, I shall be satisfied.

Second, the refrain.—You general practioners may say that you do not treat your cases that way. I am glad to believe that you do not, since the medical profession of the South is ever in the forefront of progressive medicine and its leading members have long ago demonstrated their belief in the more scientific treatment of appendicitis by the aseptic scalpel. But if you do not treat your cases in the manner indicated, which is essentially the plan I formerly followed, you know doctors who do !

MORBIDITY AND MORTALITY.

There should be neither, except it be from rare accidental cause as pneumonia or nephritis. The limitations of this paper forbid a discussion of the morbidity and I will enter into only a brief consideration of the mortality. Remember this—when you sign the death certificate of a child that died of appendicitis, we should lay the

flattering unction to our soul that *somebody has erred* !

In the two series forming the basis of this paper, there occurred among the fifty-five young persons in the first hundred, two deaths; in the sixty-seven of the second hundred, one death; or three deaths in one hundred and twenty-two operations for appendicitis in children and young adults, including every variety and sequelae of the disease. This mortality, 2.5 per cent. is not high certainly, but there should not have been any.

DEATHS.

The three deaths were in patients seen late in the attack. Only one of the patients was from Guilford County and in that instance the attending physician was certainly not to blame.

I. A boy fourteen years old was seen on the second or third day of a fulminant attack by his physician, a most competent man. He urged operation which was refused. The next day I saw the case and the family reluctantly consented to an operation. We found a gangrenous appendix and general peritonitis of the most virulent type. The boy lived ten days, finally succumbing to the sepsis.

II. The second death occurred in a boy of twenty; he had been sick four days when he entered the hospital and had septic pneumonia, septic acute nephritis, while at operation the tissues of the abdominal wall were so infiltrated with the infection that they were literally "water-logged" with septic material. I tried the Ochsner treatment with only partial success, and at operation found the old familiar picture—gangrenous appendix with general peritonitis. The struggle for life was fearful, but the sepsis continued and the final stroke came from a necrosis of the iliac vessels from pressure of a drainage tube causing a fatal hemorrhage.

III. The third patient was a boy fifteen years old. He had been sick a week when he was brought to the hospital. He was seen in an advanced stage of a general peritonitis, with wild delirium, restlessness, vomiting, circulation and vital forces failing. I put a special nurse with him to keep him in bed and tried for seven days to apply the Ochsner treatment. By the end of the week there was apparently a lull in the storm and I quickly opened the abdomen, evacuating a large quantity of foul pus. I did not even attempt to remove the appendix. The next day he seemed decidedly better, but on the second day grew rapidly worse and died. The autopsy showed a gangrenous appendix, general peritonitis, many abcesses, two ulcers of the diaphragm, one perforating entirely through, septic thrombi, etc.

In the light of the one hundred and nineteen patients that recovered does anyone doubt that these three boys would have recovered had some competent surgeon seen them in the first twenty four hours?

A study of the causes of mortality in children is interesting.

APPENDICITIS IS MORE FATAL IN CHILDREN.

First, because children have a poorly developed omentum which interferes with its function. Let me illustrate: You have heard the story of an American, who in a foreign country violated some rule of war; he was court-martialed and sentenced to be shot. When he was led out to the execution our government's consul, failing every other measure to save the condemned man, wrapped the United States flag about him and dared the soldiers to fire ! I have seen hundreds of cases in which the patient's life had been safe-guarded by the omentum, which more prompt than the doctors, hurried to the scene at the first sign of danger, and wrapped its protecting folds about the infected appendix. This picture is not over-

drawn, and abdominal surgeons testify to the part that the omentum takes in cases of intra-abdominal inflammation. But by reason of the paucity of the omentum in children, they miss the protection which older people gain from this source. This, then is one reason why an appendicitis in children so quickly becomes peritonitis, with all its evil consequences.

Second. Another reason springs from the same source. Children do not stand starvation well, and the younger the subject, the more quickly does the child succumb to starvation. I mention this because of the Ochsner treatment so prevalent now, which in *neglected cases in adults* is one of the greatest contributions to surgery I have seen in many years. But Ochsner, himself, cautions us against the prolonged use of the starvation feature in children. Children do not stand starvation well, as already stated, because of their small omentum, which is but scantily supplied with fat. No matter what one is ill with, if food is withheld, he begins at once to consume the fat in his omentum. That explains why the waist-band gets loose the first thing when we get sick. Our omentum is our camel's hump that carries us across the Sahara of starvation.

Third. Another anatomical explation is the rich blood and lymphatic supply that obtains in the young. The accompanying illustrations, (Figs. III. and IV.) will give you a fairly correct idea of the abundance of both.

True, there are the same number of lymphatics and blood-vessels in the adult that there are in the child, but in the case of blood supply the tendency is for it to become less and less as the person gets older, *pari-passu* with the atrophic changes in the appendix itself. I wish you to note the close connection between the appendical veins and the portal circulation which is, of course, true in both young and old; and you can readily understand how a thrombus in an appendix vein could easily extend to the portal vein or be swept off as an embolus into the ascending vena cava.

It is a well known fact that the lymphatics are much more active in the young than in the old. For instance, there is no case on record where a woman under twenty years of age recovered from carcinoma of the breast. This is due to the activity of the lymphatics which quickly carry the maligant cells into the general system, beyond the reach of the surgeon's knife. The same is true in an intensified degree of the lymphatics of the appendix when there is an acute infection of that organ.

Fourth. Perhaps the greatest reason why there is any mortality at all is that some physicians will persist in treating these cases with medicines. Appendicitis is no more suitable for medical treatment, than is a case of strangulated hernia, or a gunshot wound of the abdomen, Why should the family physician insist on the surgeon operating on a patient with diffuse peritonitis and intestinal obstruction, and at the same time withhold one with indigestion, pain and iliac tenderness, when he knows that they are part and parcel of the same process, and the one offers every chance of recovery with an immediate operation, while the other offers scarcely any hopes of success no matter what you do? The physician should reverse his rule of action and offer the early and withhold the late cases. In fixing the responsibility upon the physician, I am not unmindful of the deep-seated prejudice that the laity have for operations generally, and the resistance they often make to the very sanest advice, but all too often the family physician yields to the wishes of the family when his own better judgment dictates otherwise. The physician is the autocrat of the sick room and he should remain

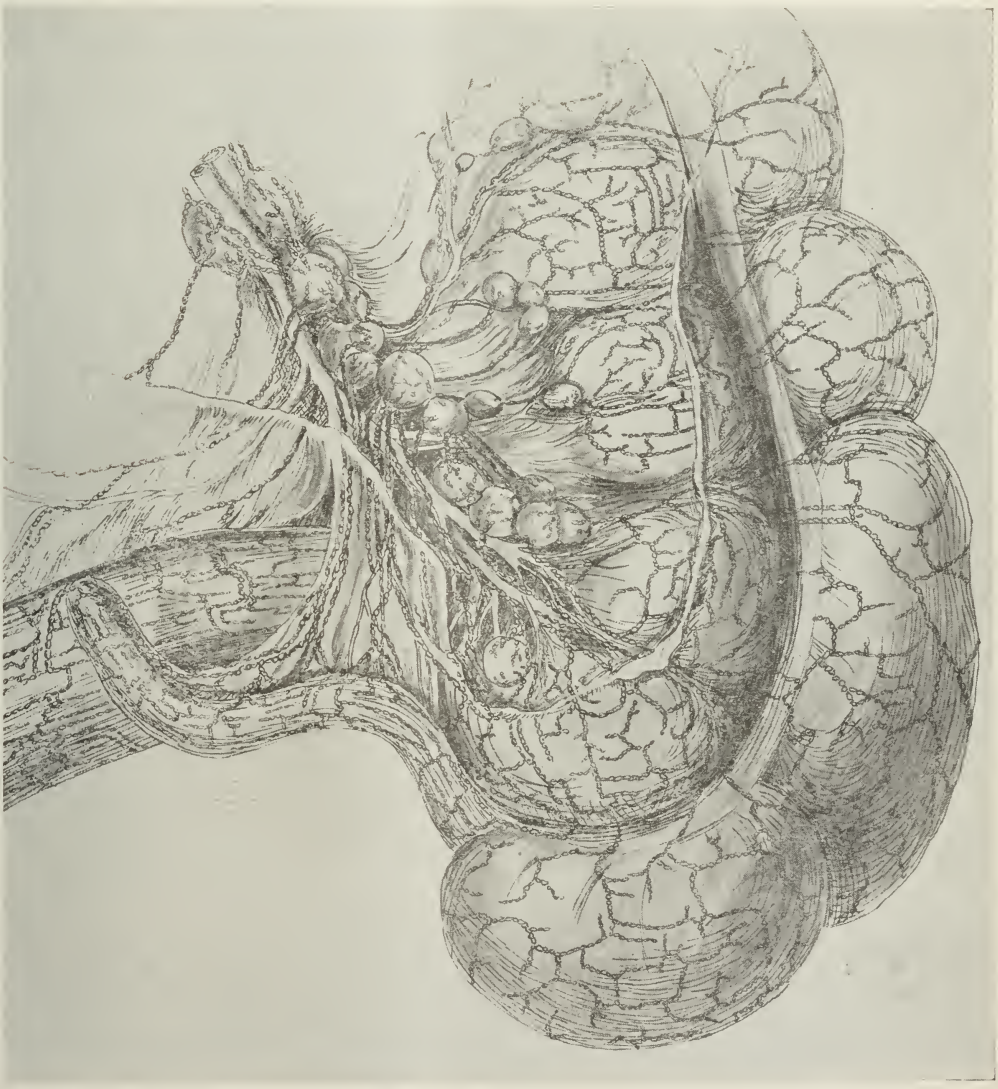


Figure IV.

on the throne ! The responsibility is his !

Treatment.—The treatment I have already sufficiently indicated. There is but one rational treatment. And I have endeavored in the preceding argument to show you why. Every reason advanced for early operation in adults is intensified when it comes to children. Operate, and operate early; operate and operate with the initial symptoms not with the terminal ones. Deaver at the last meeting of the American Medical Association—Surgical Section—read a paper reporting 500 cases occurring in children. His mortality in all cases operated on within the first twenty-four hours was *nil.* After this every hour added to the mortality. My own results bear a like testimony. What say you? Do you advise an early operation or do you say, "wait, purge, feed, blister," and let your little patient incur the risk of greater morbidity and greater mortality?

I see them at all stages, from indigestion to general sepsis; and I operate on even the worse ones. Many times as I struggle and see the little patient writhe in the agony of the late symptoms and sequelae, I think and sometimes say; "Doctor, come and see what your patient might and should have missed had you sent him earlier." I have a seven year old boy in the hospital now, who was taken violently ill on Monday and sent to me on Saturday. I opened his abdomen at once removing a gangrenous appendix and draining many deposits of pus. A few days later a pleurotomy removed a pint or two of stinking pus from his right pleura. Gangrenous appendix, general peritonitis, intestinal obstruction, empyaema—great morbidity sure. ly, and escape from death by the very skin of his teeth—all because his doctor did not send him to the surgeon during the indigestion stage, but waited to purge him, treat his biliousness, and see if he would not get better.

Brethren, these things ought not so to be !

I am painfully conscious of the limitations of human knowledge, speaking from a personal standpoint, and the most advanced among us are only a step ahead of those behind us, and this message is not given in a spirit of invidious comparison; but realizing as I do, and as only one who, like the surgeon, stands at the focus of an ever widening circle of professional work can realize the relation between the Alpha and Omega of this great question. I would be false to my sense of duty, to my professional brethren and to the public weal as well, should I fail to cry aloud !

MODERN METHODS OF TREATING TYPHOID FEVER.

L. A. RISER, M. D., LEESVILLE, S. C.

Glancing over the whole category of diseases, we will probably find none whose treatment has undergone such a complete change as that of typhoid fever.

Thirty years ago the typhoid patient was not allowed to have water, either internally or externally, while to-day, we regard water as of more importance than all the drugs in the pharmacopoea. At that time sweet milk was used exclusively for diet, and to-day it is almost discarded. Formerly it was regarded, that a liquid diet was necessary because of the danger of

solid food causing intestinal hemorrhage.

Every one knows the action of typhoid germs in the small intestine.

Peyers patches, which seem to be the seat of attack, act as a means of sustenance to the bacilli, and in their congested condition solid food would naturally have a tendency to cause erosion, and consequently hemorrhage and perforation.

Recently the theory has been advanced that typhoid bacilli attacked Peyers patches because there was nothing in the intestine on which they could feed. This would seem quite plausible and lately, in all of the hospitals, where the experiment has been tried, the method of feeding typhoid patients soft food from the beginning of the attack is quite generally employed.

It has many advantages. The patient's weight and strength is kept up and the complications are just as few as when a strictly liquid diet is adhered to. Two years ago I was so unfortunate as to have an attack of typhoid. I had seen the patients in the free wards treated by feeding and readily gave my consent to be the first private patient in the hospital to be fed. As a result, I got up from my three weeks' attack, having lost but twelve pounds in weight and the first day I was allowed to get up, I got out of bed and into my chair without assistance. With the exception of persistent constipation, there was little discomfort during the attack and no complications.

The sense of intense hunger during convalescense, which most patients have who are fed on a liquid diet, is not experienced by the patient fed on a soft diet. As to hydrotherapy, few, if any, will admit that the treatment of temperature alone is essential.

In our private practice, in many cases where a patient is nervous and afraid of cold water, or the family objects very seriously, we have found a hot mustard foot bath and an all over rub of equal parts of alcohol and warm water an excellent way of reducing temperature. The tub bath is impracticable in the majority of cases in private practice and we feel satisfied if we can get a compromise in the cold sponge.

The object of sponging is not alone to reduce temperature. It also acts on the nerve centres, stimulates peripheral circulation, increases respiratory interchange and by its effects on blood pressure, increases elimination. In intractable children, the harm done by attempting to give the cold bath often far exceeds the good effects.

Many authorities on diseases of children denounce the Brand method completely, on account of the frequent cardiac complications in the typhoid of children, and it has been suggested that hemorrhage and perforation is more liable to occur in children by handling on account of emaciation and consequent thinning of the abdominal walls.

The treatment of children by alcohol compresses is now successfully employed. This method is also used for adults with equal success. A pad of absorbent cotton is wrung out of alcohol and applied to the abdomen. This is covered by another pad of cotton or gauze, wrung out of cold water. Over this is put a rubber or oiled silk bandage to keep out the air and thus prevent evaporation. The water pad is renewed every hour and the alcohol pad every two hours.

The alcohol, while reducing the temperature, has also a stimluating effect on the heart.

Serum therapy is probably the latest method used in treating typhoid. A number of sera have been used both from convalescents and from horses.

Walger in 1902, reports a series of cases in the Paris hospitals for twenty months with the serum treatment, with a mortality of five per cent. He

also reports 100 cases in which the serum was used before the tenth day without a death. Wright has been doing a lot of experimental work along this line and the most encouraging results in bacteriological methods are recorded by him. He has gotten out a vaccine to be used as a prophylaxis. In all, quantities of a culture in which the bacilli have been killed are used.

The vaccines have been used extensively in the British army.

Calomel and iodine have been used to abort the disease, but while a few cases are reported where they were successful, they have met with disfavor in most cases. They were given to act as intestinal antiseptics.

Granted that every typhoid germ may be killed in the intestine, which we know to be impossible, still we would have the bacilli in the blood, and the disease would consequently run its course.

In Columbia one physician reports a number of cases successfully treated with the typhoid serum. Others have had but poor results. We await with interest further and more extensive experiments along this line.

TO AROUSE PROFESSIONAL INTEREST.

Read in Columbia, S. C., July 21st, 1910.

BY E. A. HINES, M. D., SENECA, S. C.

Mr. President and Members of the Seventh District Medical Association:

I am especially glad to be present with you to-day, for the District Association as an idea looking to the benefits, both to the individual member and to our State organization, has been a hobby of mine for ten years. If you will refer to the transactions of the State Association for 1900, you will find that in a letter to President Walter Porcher, I advocated such an innovation to stimulate interest in our profession. Six years later after the great American Medical Association movement swept the country, incorporating this idea, the Fourth District Association was formed. I was a member of the Constitutional Committee, elected its secretary for three years and finally its president for one year. You will pardon this bit of seeming egotism, I trust, and believe, that it is due entirely to the consummation of hopes, long entertained, and that my cup of joy has simply overflowed for the time being. Before I shall have concluded my remarks, you may have further cause for overlooking frequent allusions to myself or my work, yet it is with all the modesty at my command, that I shall proceed to relate at your invitation, something about the American Medical Association and especially the St. Louis Session. I do not know just why the House of Delegates in convention at Laurens selected me to represent the State Association at St. Louis. I had some curiosity to look up the record and see just who were the delegates selected twenty years ago at the Laurens meeting. Among the sixteen elected, I find many whose names have been indelibly written upon the scroll of fame. That prince of surgeons, Robert A. Kinloch; Peter Gourdin DeSaussure, distinguished gynecologist and obstetrician; P. A. Wilhite, whose name has been linked with that of Crawford W. Long, in the first administration of ether.; C. Kollock, eminent as a pioneer abdominal surgeon; J. R. Bratton, prominent as a surgeon in

war and in peace; T. J. McKie, scholarly ex-president of our State Association and B. W. Taylor, one of the most successful general practitioners this State has produced. These all have passed away, but left undying records of their interest in the relief of suffering humanity. Some of those delegates, however, still live and their names, in most instances, are household words in the homes of thousands of our citizens. In the olden days of our State Association, delegates were often selected because of their own desire to go, their financial ability or their special fitness. Just why I was entrusted with this great honor under an entirely different system is problematical. I recall some of the reasons given in Mark Twain's "Life on the Mississippi," for sending a man to St. Louis, that, related in his own inimitable style may enlighten us. He was returning from that memorable five thousand mile journey to the scenes of his early struggles as a pilot. Said he: "We took passage in one of the fast boats of the St. Louis and St. Paul Packet Company, and started up the river. At seven in the morning we reached Hannibal, Mo., where my boyhood was spent. The only notion of the town that remained in my mind was the memory of it as I had known it when I first quitted it twenty-nine years ago. That picture of it was still as clear and vivid to me as a photograph. I stepped ashore with the feeling of one who returns out of a dead-and-gone generation. I had a sort of realizing sense of what the Bastile prisoners must have felt when they used to come out and look upon Paris after years of captivity, and note how curiously the familiar and the strange were mixed together before them.

"It was Sunday morning, and everybody was abed yet. So I passed through the vacant streets, still seeing the town as it was, and not as it is, and recognizing and metaphorically shaking hands with a hundred familiar objects which no longer exist; and finally climbed Holiday's Hill to get a comprehensive view. The whole town lay spread out below me then, and I could mark and fix every locality, every detail. Naturally, I was a good deal moved. I said, 'Many of the people I once knew in this tranquil refuge of my childhood are now in heaven; some, I trust, are in the other place."

"From this vantage ground the extensive view up and down the river, and wide over the wooded expanses of Illinois, is very beautiful—one of the most beautiful on the Mississippi, I think.

"An old gentleman, out on an early morning walk, came along, and we discussed the weather, and then drifted into other matters. I could not remember his face. He said he had been living here twenty-eight years. So he had come after my time, and I had never seen him before. I asked him various questions; first about a mate of mine in Sunday-school—what became of him?

" 'He graduated with honor in an Eastern college, wandered off into the world somewhere, succeeded at nothing, passed out of knowledge and memory years ago, and is supposed to have gone to the dogs.'

" 'He was bright, and promised well when a boy.'

" 'Yes, but the thing that happened is what became of it all.'

"I asked after another lad, altogether the brightest in our village school when I was a boy.

" 'He, too, was graduated with honors, from an Eastern college; but life whipped him in every battle. He died in one of the territories years ago, a defeated man.'

"I asked after another of the bright boys.

" 'He is a success, always has been, always will be, I think.'

"I inquired after a young fellow who came to town to study for one of the professions when I was a boy.

" 'He went at something else before he got through—went from medicine to law, or from law to medicine, then to some other new thing; finally wandered off to Mexico and died there without a penny to buy a shroud. '

"I named another boy.

" 'Oh, he is all right, lives here yet; has a wife and children and is prospering.'

"I named three school-girls.

" 'The first two live here, are married and have children; the other is long ago dead—never married.'

"I named with emotion, one of my early sweethearts.

" 'She is all right. Been married three times; buried two husbands, divorced from the third, and I hear she is getting ready to marry an old fellow out in Colorado somewhere. She's got children scattered around here and there, most everywheres.'

"The answer to several other inquiries was brief and simple, such as, 'killed in the war.'

"I named another boy.

" 'Well, now, his case *is* curious. There wasn't a human being in this town but knew that that boy was a perfect chuckle-head; perfect dummy; just a stupid ass, as you may say. Everybody knew it, and everybody said it. Well, if that boy isn't the first lawyer in the State of Missouri to-day, I'm a Democrat!'

"Is that so?

" 'It's actually so. I'm telling the truth.'

"How do you account for it?

" 'Account for it? There ain't any accounting for it, except that if you send a d—d fool to St. Louis, and you don't tell them he's a d—d fool, they'll never find it out. There's one thing sure, if I had a d—d fool, I should know what to do with him; ship him to St. Louis—it's the noblest market in the world for that kind of property. Well, when you come to look at it all around, and chew at it and think it over, don't it just bang any thing you ever heard of?'

"Well, yes; it does seem to. But don't you think maybe it was the Hannibal people who were mistaken about the boy, and not the St. Louis people?

" 'Oh, nonsense. The people here have known him from the very cradle —they knew him a hundred times better than the St. Louis idiots could have known him. No; if you have got any d—d fools that you want to realize on, take my advice—send them to St. Louis.'

"I mentioned a great number of people whom I had formerly known. Some were dead, some were gone away, some had prospered, some had come to nought; but as regarded a dozen or so of the lot, the answer was comforting:

" 'Prosperous—live here yet—town littered with their children.'

"After asking after such other folk as I could call to mind, I finally enquired about myself.

" 'Oh, he succeeded well enough—another case of d—d fool. If they'd sent him to St. Louis, he'd have succeeded sooner.'

"It was with much satisfaction that I recognized the wisdom of having told this candid gentleman, in the beginning, that my name was Smith."

The first impression made upon me by the House of Delegates of the American Medical Association at St. Louis, was the perfect system in vogue. No member could pass the Credentials Committee without absolutely correct credentials. The entrance to the House is always guarded and the badge must be shown every time a member enters. In round numbers, the House consisted of about 150, in

constant attendance. The new member realizes at once, the vast amount of work to be done and his own incompetency in comparison with the veterans who have seen service for a series of years. The House of Delegates numbers some as skilled parliamentarians as I have ever been thrown with or observed outside of the legislative department of our Government at Washington. To become at all prominent in the affairs of the American Medical Association one should cultivate to the utmost, this important art and science, for thereby he may at one masterly stroke bring into the limelight the State he represents, though it be very insignificant in point of membership. The work is accomplished chiefly by committees and there is hardly as much general discussion as we have in our small House of Delegates at home. President Gorgas appointed me a member of one of the important reference committees and many matters, most of which you are vitally interested in, came before us for final report. It has become necessary for the American Medical Association to abandon the well known Red Cross insignia, as it belongs primarily to another organization, and to select one instead. The report of the insignia committee, after two years of exhaustive research, and the aid of the best artists in America, was one of our special duties. I present for your information a specimen of selected insignia, with the changes agreed upon as follows: The color shall be scarlet and gold, and the emblem, the knotty rod entwined with the serpent. The button to be circular one-half inch in diameter, central portion scarlet enamel, on which shall be placed the serpent and the knotty rod in gold, this to be surrounded by a band of gold in which the letters, A. M. A. shall appear in scarlet enamel.

Every doctor is likewise interested in the report of the anesthesia commission, which in brief was:

Nitrous Oxide combinations should only be administered by an expert.

Chloroform should be discouraged for minor operations. Ether, the anesthetic of choice for the general practitioner.

The report of the Pharmacopoea Commission also came up.

The question of admitting, as branches of the American Medical Association, the Southern Medical Association and similar organizations, came before us. These then are some of the weighty matters our committee had to consider. Among the most important phases of the work of the House of Delegates to my mind, consisted in the unanimous consent to publish to the world, the standing of our medical schools and the deliberate intention to uphold the present management of the affairs of the Association. Also to endorse the great work of the Council on Pharmacy and Chemistry which designs first hand, from our own laboratory, to tell us the truth about the remedies we employ and thus we will not be dependent upon the detail man or the excerpts from biased commercial interests. After "the heat and burden of the day," so to speak, finally comes the election of officers and the place of meeting for another year. If any of the members have been relaxing and dozing from their labors, when the president announces, "nominations in order," it is as if a live wire had been dropped in their midst. If Americanisms were permissible in a paper like this, before a scientific audience like this, I'd call it a "get-busy" occasion in the extreme.

Dr. John B. Murphy, master surgeon and magnetic teacher, was elected president. I have here pictures of officers and some delegates. Dr. Geo. H. Simmons, general secretary, tried his best to resign, after eleven years

of service, but not a single member would hear to it. In nominating him, Chase, of Texas, said, "I know not what you may think, but I feel that we should not allow the howling coyotes among the enemies of this organization to spread broadcast over this land, the false report that they have urged and have secured changes in the American Medical Association." Following this was a most remarkable love feast to Dr. Simmons, which he can but treasure to his dying day. The place of meeting next year is Los Angeles, California.

This paper would not be complete without attempting a bird's-eye-view of the entire general meeting.

The first and only general session was held Tuesday morning, June 7th, in the auditorium of the Odeon theatre. The four thousand members, the elite of the St. Louis business, professional and social life, and entrancing music, made a picture worth recalling. The House of Delegates sat upon the stage. My bosom swelled with pride for South Carolina, as First Vice-President Robert Wilson, Jr., took the chair, while the president, Dr. William Welch delivered his address. A member of the House has little time for visiting the scientific sections, yet I dropped into the one on Public Health and Preventive Medicine, which by the way, would have been presided over for a time, by our efficient State Health Officer, Dr. C. F. Williams, First Vice-President. He was detained at home by illness in his family. There was an interesting discussion of Epidemic Anterior Poliomyelitis. The section devoted much of its time to the question of personal purity and how to promote same in our schools. The key note possibly of the whole convention was the discussion of preventive medicine; hook-worm, pellagra, typhoid fever, cancer and opthalmia neonatorium. I also dropped into the section on Diseases of Children, and was greatly interested in a paper by that eminent Surgeon, Dr. Arthur Dean Bevan, on operative procedures for pyloric-stenosis in infants.

While his research was exhaustive and success good, he by no means urged hastily undertaking the operation. I might add just here that the American Medical Association will shortly issue the archives of Surgery and the Archives of Pediatrics, both purely scientific and free from any taint of commercialism as they will be furnished at cost. The scientific exhibit deserves more than passing notice. It is worth the trip to see. No where else can so much be seen in such a concentrated way expressive of the genius of the American doctor. The exhibit of St. Mary's Hospital, Rochester, Minn., on goitre was very instructive. The St. Louis Medical History Club had a valuable exhibit. One saw the works of the masters of the old world and portraits and busts of some of St. Louis' great men, Beaumont, Hodgen and J. N. McDowell. The commercial display of practically every instrument, drug or book that the doctor uses is a revelation. In conclusion I can but briefly allude to the entertainments. Suffice it to say that with the eighteen thousand dollars spent for that purpose, we had no trouble whiling away our leisure moments. St. Louis itself is a great city and in the heart of a most interesting country. A high authority has said: The basin of the Mississippi is the body of the Nation and that as a dwelling place for civilized man, it is by far the first upon our globe. The great river receives, and carries to the Gulf, water from fifty-four subordinate rivers that are navigable by steamboats. The area of its drainage basin is as great as the combined areas of England, Wales, Scotland, Ireland, France, Spain, Portugal, Germany, Austria, Italy, and Turkey; and almost all of this wide region is

fertile. The wonderful growth and power of the American Medical Association centers about this far famed river. It was at St. Paul, near its source, early in this decade that it was re-organized. At New Orleans in 1903 that the code of Ethics was revised. At Chicago in 1908 we had the banner year of attendance, over six thousand, and in this same city its founder, Dr. N. S. Davis spent most of his active life; and it is as you know our headquarters. Within our memory easily, it was deemed essential to visit the medical centers of the North and East to enlarge one's equipment, in surgery especially; to-day is there a doctor in the remotest regions of civilization who would not gladly, if opportunity offered, undertake the most laborious journey to the clinics of Murphy, Crile, Ochsner and the Mayos. They are doing it, men of the greatest renown, as well as the most obscure practitioners. The American Medical Association now numbers 34,176; constituent Associations 70,146; while our own South Carolina Association has 740. The latter I earnestly desire to see reach the 1,000 mark. I became early in my career impressed with the incalculable advantages to be enjoyed by regular attendance upon the annual sessions of the American Medical Association; and the careful reading every week of its unsurpassed Journal. The latter contains the gist in each issue of the progress of medicine in every civilized clime. The American Medical Association is rapidly lifting men out of the slough of petty jealousies, ignorance, pure commercialism and planting their feet upon the solid rock of scientific medicine.

I have myself, at little expense through it, been enabled to visit every medical center in this country, save one. I have seen there and heard most of America's great physicians and surgeons and many from abroad as well. It has been my privilege in this way to hear the voice of nature and science commingle on New Jersey's far famed coast. I have felt the intellectual thrill, first hand, of New England's classic city; I have listened to her deliberations by the side of the Great Lakes of the North; I have enjoyed likewise, the gentle zephyrs of the Gulf of Mexico; and if a kind Providence continues to smile upon me, will see the sun go down in the peaceful waters of the Pacific in 1911.

REPORT OF A CASE OF PUNCTURE OF SMALL INTESTINE FROM A BLOW ON THE ABDOMEN.

J. BENNETT TOWNSEND, Anderson, S. C.

Puncture of the small intestine from a blow received on the abdominal wall without any visible injury to the abdominal wall, may be a frequent occurrence for all I know. I have not consulted the literature on the subject, and have no idea as to the number of cases reported. I can boast of but one, and as that case was of interest and, I hope, of benefit to me, it occurred to me that perhaps others may be interested in this case and profit by my mistake.

On August 14th, a negro boy, age fourteen, who up to present illness was perfectly healthy, was told to put a buggy under a shed. Near this shed was a fence and at the corner of the fence the middle plank extended a foot or two beyond the post. The

end of this plank was not square but was sloping, being that part of the stock which was cut in felling the tree. The boy ran along with the buggy until he neared the fence, when his attention was attracted by some passing object, he ran into the fence, striking himself just below the left of the umbilicus with the protruding end of the plank. He fell to the ground and cried out in pain, and was carried into the house. I was summoned, and saw him at three p. m., about half an hour after he was hurt. He complained of pain just below and to the left of the umbilicus. On examining his abdomen I could find no evidence of where he had received the blow. He was somewhat tender on pressure about his umbilicus, his pulse was 100, he was perfectly rational, answering intelligently all the questions asked him. and did not seem badly hurt. There were none of the typical symptoms of shock present. I prescribed rest in bed, together with topical applications, assuring his parents that his injuries were slight and that in a short while he would be all right. The next day I received a summons to come back and see him as he was not doing well. I saw him about two p. m. The clinical picture had entirely changed. The pulse was rapid and dicrotic, the temperature was 103, respiration rapid, skin hot and dry, tongue foul and sorges on his teeth. His belly was somewhat distended, but not markedly so. There was still tenderness about the umbilicus but not below; he was delirious, but could be aroused for a few moments at a time; he had been vomiting occasionally since morning, his bowels had moved freely and contained no blood; his general appearance was that of a very sick typhoid patient. At one that night he died, about thirty-six hours after receiving the blow on his abdomen. Permission was asked and granted to do an autopsy. The belly was opened in the median line from the ensiform to the pubis. As soon as the belly was opened quite a quantity of fluid in which could be seen small particles of feces was found. Just below to the left of the umbilicus there was a dark echomosis of the great omentum and just under this was a hole in the small intestine about the size of one's thumb nail, out of which the contents of the intestine were slowly oozing. The small intestine was not inflamed, as in peritonitis, but was empty as if the boy had been prepared for an operation. The large intestine was distended with gas. All the other organs were normal. The hole in the intestine must have been made at the time of the injury and was not the rusult of necrosis.

The points of interest in this case are, the short time the boy lived after his injury, thirty-six hours; the absence of symptoms of shock and peritonitis; the presence of what appeared to be auto-intoxication and the absence of all evidence of injury on the abdominal wall. It is useless to comment on how easily this life could have been saved if only the proper surgical steps had been taken. This case presses home the old truth that in all cases where we have the least grounds to suspicion an injury to the abdominal viscera it is the part of wisdom to make any explorating incision to satisfy one's self as to the nature of the case.

EPIDEMIC POLIOMYELITIS.*

BY BEVERLEY R. TUCKER, M. D. RICHMOND, VA.

Mr. President and Members of the Pee Dee Medical Association:—It is with great pleasure that I acknowledge the compliment of being asked to address the Pee Dee Medical Association; and it is a particular pride that the subject given me is Poliomyelitis, or infantile paralysis, because my first genuine conception of this disease was derived from one of South Carolina's most honored and gifted sons, Dr. Wharton Sinkler, of Philadelphia.

Possibly it was his innate love of children, combined with his recognition of the fact that the disease at that time, in the seventies, needed more extensive study, which led him to give the subject especial attention. His contributions to the knowledge of this disease appeared from time to time, until his latter years, and they have been quoted in every text book and paper of importance on infantile paralysis which has been written in the last quarter of a century. He was one of the first to call attention to the seasonal occurrence of the disease. Possibly it was my association with Dr. Sinkler for a year and a half which has made me ever since take a keen interest in this disease and it is certain that from him I gained many valuable points in its treatment, perhaps the most valuable being never to give up hope of improvement by the various therapeutic measures.

I have chosen to entitle this address Epidemic Poliomyelitis, because we should recognize that the disease is epidemic although sporadic cases frequently occur. The old nosology of acute anterior poliomyelitis is inadequate, because the degeneration is not confined to the anterior horns but may involve other portions of the spinal gray matter, the anterior nerve roots and frequently, as we shall see, the meningines. At times evidence of degeneration is seen in the gray matter of the brain and even in the white matter of the brain and cord. The name Infantile Paralysis is too indefinite for medical use and the disease may occur in adults. The New York Commission which studied 2,500 cases in the epidemic of 1907, selected the terminology Epidemic Poliomyelitis.

We are then confronted with a disease which is occurring in epidemics of increasing frequency in the United States, a disease which appears to spread more or less closely along lines of travel, a disease without clearly understood premonitory symptoms and a disease which, although we know it to be infectious in origin, we have not been able to isolate its particular germ nor discover definitely its mode of entrance into the body. Were I reading this paper a year hence it is most probable that I could name the causative organism and state its route of entrance, for the extensive experiments of Flexner at the Rockfeller Institute, and others, lead us to believe that we are on the verge of solving this problem.

I will not ask you to dwell long on the sentimental side of the picture you all know so well of a child embodying the hopes of its fond parents, well and strong and overflowing with animal spirits to-day, after perhaps a few days of not unusual illness again well constitutionally but probably a hopeless cripple, dragging through life one or more dead limbs—a load on his mind as well as his body. But

*An address read by invitation before the Pee Dee Medical Association at Florence, S. C., Nov. 9, 1910.

this is the dark side of the picture and many children, many more than is generally supposed, have mild attacks from which they entirely or practically recover, while others with rather pronounced paralysis have their burdens much lightened by proper treatment and the adoption of mechanical appliances. The orthopedic and mechanical requirements of old cases of poliomyelitis will only be lightly touched upon in this paper, while more time will be spent upon its early recognition and the early application of treatment.

The work of Flexner, Robertson, Chesley and others enables us to say that poliomyelitis is an acute infectious disease, the germs or toxins of which seem to have selective faculty for the spinal gray matter, especially that of the anterior horns, although other nerve tissue and the parenchyma of the heart, liver and kidneys may be affected. In the cord there is congestion with areas of softening and often points of hemorrhage which chiefly affect the enlargements of the cord, and at times the medulla. The infection seems to be mostly in the lymph channels of the anterior aspect of the cord with congestion frequently of the meningines and infiltration of the pia mater. Degeneration and destruction takes place chiefly in the anterior cells and anterior nerve roots. The micro-organism of poliomyelitis has not been found. It is probably ultramicroscopic. Geirsvold's diplococcus has been discovered in some cases, but its injection into animals has frequently failed to produce the disease. Flexner has transferred the disease from man to monkey and from monkey to monkey, but has not isolated the micro-organism. He inclines to believe the usual route of infection is through the nares. No specific antitoxin nor serum has been discovered for the disease.

Sensory disturbances are not permanent. Reaction of degeneration to electrical tests is present and the paralysis is flacid except early in the meningeal cases, when the muscles may be rigid for a time. The whole limb or the lower part or only groups of muscles may be affected in movement. In the leg, the peronei and the anterior tibials are chiefly affected; in the thigh, the psoas, glutei and iliacus are the muscles commonly attacked. In the upper arm, the deltoid, biceps and the muscles of the scapula are usually atrophied, while in the lower arm the flexors or extensors of the wrist or fingers are paralyzed. In severe cases marked atrophy takes place sooner or later and the limb hangs flail.

To obtain a general idea of the symptoms of poliomyelitis I thought it well to abstract the following from the report of Collective Investigative Committee on the New York Epidemic of 1907. (Nervous and Mental Disease Monograph, Series No. 6). Starr collected and summarized forty epidemics previous to this one. The New York epidemic occurred in the Summer and Fall of 1907, and consisted of 2,500 cases. Full histories embracing several hundred questions were obtained in 752 cases. The New York epidemic began in May, reached its height in September, and subsided in November. The same seasonal curve was observed in Massachusetts during the same year. 507 of the 752 analyzed cases occurred between one and four years of age. Three of doubtful diagnosis between twenty and thirty years of age. In regard to the communicability, 700 houses had one each, eighteen houses had two cases each, five houses had three cases each. It spread along ordinary routes of travel, Mortality was about five per cent. It is thought from this that the infection was of a mild form. In 1,053 cases in 1905, reported from Norway, the mortality was thirteen per cent. The incubation period average time is given

from less than three days to one week. In regard to conditions preceding the onset it was found that bottle and breast-fed infants were alike susceptible. Previous diseases seem to have had no influence. Exposure to heat was not a marked factor.

The range of temperature was from 100 to 106 F., the greatest number ranging from 101 to 104 F., at the highest. The duration of fever was usually two or three days. It is noteworthy, however, that fever lasted seven days or more in 111 cases. Of these, in fourteen it lasted eight days; in ten, ten days; in twenty-six, two weeks; in eight, three weeks; in four, four weeks; in one, five weeks; and in one six weeks. Vomiting was present at the onset in almost twenty-five per cent of the cases. The stools had practically no significance.

Among the nervous symptoms of onset, restlessness was the most common, occurring in 369 cases. Next most frequent was headache, 162 cases, more often frontal (seventy-four cases) than either general (sixty-two cases) or occipital (twenty-six cases). Delirium supervened upon the restlessness in sixty-two cases, convulsions in sixty-five cases, twitching in eight cases. Apathy was present in 294 cases; stupor in seventy-one.

A marked factor was the rigidity of the neck which was present in 121 cases; along with those cases which had photophobia, (twenty-six cases) these might well be placed in Wickham's category of the meningeal type. The cases had an onset closely resembling cerebro-spinal meningitis. There was high temperature, 102 to 104 F., and rigidity of the neck, which in one case lasted as long as two weeks. The presence of Kernig's sign and of spasticity of the legs rendered the diagnosis still more difficult. Almost all the cases had pain and tenderness during the first few days. Marked sweating frequently takes place.

Paralysis occurred from the first to the twenty-first day. The parts affected were from one leg to both arms, neck and both legs. The paralysis was spastic in thirty eight cases. In 86 per cent some form of the paralysis remained.

Last Spring another epidemic began in New York; and appeared shortly afterwards in Philadelphia, traveling from thence to Baltimore and Washington, and reached Richmond and Norfolk about the middle of the Summer. How much further the main spread of this epidemic has traveled I am unable to ascertain, but from Richmond and Norfolk it seems to have diffused itself so that cases have appeared in many small towns in Virginia and North Carolina. One branch of this epidemic also went Westward. It has been supposed that the large epidemics have been introduced into this country from Norway and Sweden by immigration. In a small settlement in Hanover County, eight or ten miles from Richmond ,six cases have appeared this Summer in the practice of one of my colleagues, Dr. J. L. Deitrick, in the radius of two or three miles. I have visited this locality with him and we were unable to ascertain the source of this small epidemic or the mode of infection. Outside of this locality for some miles no other cases have been heard of.

Epidemics seem to vary in severity, some being mild, some being very severe with many of the cases accompanied by meningeal symptoms and some being of mixed mild and severe types, which seems to be the case with the epidemic beginning in New York last Spring. Many of the cases which I have seen in the last few months have begun with more or less severe meningitis. Meningitis at the onset seems to be more frequent than the study of the literature on the subject would lead us to suppose. A few remarks on

my personal experience with some recent cases will probably not be out of order. I have recently seen twelve cases beginning with meningitis, usually of quite a severe type, but only lasting a few days, excepting two cases in which the meningeal symptoms lasted several weeks. In one of these cases the child previously had tubercular glands which spontaneously opened externally and this led me at first to diagnose the case as one of tubercular meningitis, although Dr. Call, the family physician, took the view that it was epidemic poliomyelitis of the meningeal type. A lumbar puncture showed the cerebral spinal fluid under increased pressure. Examination of this fluid was negative. The child had partial blindness, rigidity of all extremities, retraction of the head, widely dilated pupils, a scaphoid abdomen, a cephalic cry, temperature from 100 to 103.7., some retention of urine, partial coma and a double Kernig's sign. Improvement began immediately after the spinal puncture and the withdrawal of 25 c. c.'s of fluid and in a few days the temperature had subsided, sight was good and the child was bright, but a double foot drop was noticed, more marked on the left, and there was weakness in groups of the muscles of the lower extremities especially in the anterior tibials.

I might say here that the usual text book description of the onset of poliomyelitis does not hold good, for beside the cases beginning with the symptoms of meningitis, I have the history of a case coming on after six weeks in bed with acute inflammatory rheumatism, of a case the onset of which was said by an excellent physician to resemble malaria, of a case following an attack of tonsilitis, of a case following an attack of acute bronchitis, of a case beginning with a convulsion, of a case following two weeks of severe diarrhoea, of a case in which vomiting occurred two weeks before any paralysis appeared and in which the child was apparently well except constipated in the interim. In fact, in the majority of the cases I have seen, the onset has not been the typical text book picture of the child going to bed well having a mild gastro-intestinal attack with nausea, vomiting and a slight rise of temperature. Therefore it is of importance, especially during an epidemic, to bear poliomyelitis in mind, not only in the case of gastro-intestinal disturbance, but as a possibility in the case of every acutely sick child. As a thought to be considered in passing, might it not be possible that the micro-organism exists in the nares, or elsewhere, in numerous healthy children and gives no symptoms when their resistance is good, but when the child is taken with an ordinary sickness the resistance is lowered and the micro-organism of epidemic poliomyelitis gains entrance and then gives symptoms of its own?

It is probably a coincidence only, but the left side of the body has been more severely affected in most cases I have seen. I have only seen one case in which the face was affected. I have seen one case with paralysis involving all four extremities and back muscles. In all of my cases the paralysis cleared up except in one or two of the extremities. In many cases the general symptoms of the child occupied the attention of the parents, and sometimes of the attending physician, to such an extent that paralysis was not observed until during convalescence when the child attempted to walk. It is interesting to note that in four of my recent cases the children had just returned from a trip on the railway when the attack occurred. On the other hand one case lived ten miles from the railroad, had never taken a trip, and there were no other cases in the neighborhood. One of my cases occurred two years ago in the country in a child who had just before

taken a railway trip. There were no other cases in the neighborhood. Eighteen months after this child was taken, two other children on the same farm were stricken with the disease and these children had not been off the place. If these cases were contracted from the first then the organisms must have great powers of life.

The question has frequently been asked me whether poliomyelitis is contagious or not. During the febrile stage, especially in the meningeal form, I think it is contagious, although the cases on record where other members of the family have been affected are not very numerous. At any rate until we know more about it a strict quarantine should be maintained until the acute symptoms subside. Its epidemicity in localities is probably due to the children becoming infected through the same source. The water, milk and food supply have been investigated in many of these localities with failure to find the causitive source. After an extensive review on the subject I believe that the infection occurs chiefly from the air by inhalation.

In regard to the prognosis, we may say that this varies with the virulence of the epidemic. From five to fifteen per cent. die in the initial stage; and in from five to fifteen per cent. complete recovery takes place.

The treatment of poliomyelitis may be divided in three stages, the stage of onset, lasting a few days to a few weeks, ending when fever and other constitutional symptoms subside; the stage of acute paralysis in which more or less rapid improvement usually takes place and lasts a few months and lastly the stage of residual paralysis and deformity in which the treatment is mainly mechanical and surgical.

During the first stage while the child has fever, and may be meningeal symptoms, all paralyses should be looked for and the extremities tested daily for weakness. Hexamethylenamine should be administered in doses from one to three grains, according to the age of the child, every three or four hours. It is the only drug having direct beneficial effect; and this seems due to its property of forming formaldehyde in all body fluids, especially in these cases in the cerebro-spinal fluid. If symptoms of meningitis are present, lumbar puncture should be performed, and any excess of fluid withdrawn. A brisk purgative should be given, preferably calomel or castor oil, and the bowels kept open afterwards. If there is much fever it is best reduced by cool water or alcohol sponges rather than antipyretics. If the child is very restless small doses of bromide may be given, or better still, hot baths may be administered. The child should be put on a nourishing liquid diet and be kept closely in bed. For hyperesthesia and pain warm or hot baths are most effective. Rubbing at times is beneficial.

When the most acute symptoms have subsided our attention is directed toward the improvement of the paralysis. The child should be sustained by a most nourishing diet. Cocoa butter rubs are useful to aid in the nourishment. Massage, preferably by a skilled masseur, should be instituted daily as soon as the fever subsides. Warm baths, two or three a day, serve the double purpose of keeping the skin active and aiding in the movement of the limbs. The child's head should be supported above the water and the child induced to kick and make all the movements it can in the water. It is surprising how freely a partially paralyzed limb can be moved by the patient when supported by the bouyancy of the water. The child should be given toys to play with and allowed to crawl in order to induce natural movements. Strict attention should should be given to the prevention of the deformities which are due, in

most part, to relaxed ligaments. Foot-drop may be prevented or lessened by light weight braces or adhesive plaster under the sole and brought up on the leg so as to prevent the drop. This adhesive should be removed several times in twenty-four hours for baths, massage, etc. Do not ever put the limb in a cast. When the child is in the sitting posture its legs should not be allowed to dangle because this causes relaxation of the knee joint from the weight of the leg and foot, and of the ankle joint from the weight of the foot. The feet should be made to rest on a stool or other support. Care should be exercised in not allowing the child to walk too soon or to fatigue or exhaust itself. Strychnine is of value in aiding the child to regain its strength. Cod liver oil and iron are useful when indicated. The paralyzed extremities are cold and should be kept as warm as possible by massage and wearing flannels. In about three or four weeks after the acute symptoms subside electricity may be begun. Galvanism is the best form and should be given daily with the negative pole at at an indifferent point as the nape of the neck for the arms or sacrum for the legs and the positive pole moved over the paralyzed limb from five to seven minutes. Twenty to thirty miliamperes may be given, If there is galvanic response present, interruptions may be given at each treatment. After several months of daily use, electricity should be kept up every other day for a year. Massage should be continued for years. Some member of the family can usually be instructed how to give it after the paralysis has ceased its rapid improvement. During the early stages, as mentioned above, it is best to have a skilled masseur.

At the beginning of the third stage of residual paralysis the use of braces should be considered. An orthopedic surgeon should prescribe these. Later, deformities may, in certain cases, be corrected by tendon or nerve transplantation. Exercises of precision or re-education are useful in bringing into play non-paralyzed muscles to take the place as far as possible of paralyzed ones. Massage several times a week should be continued. Contracted tendons have at times to be lengthened by surgery.

In the treatment of poliomyelitis we should hesitate long to give up hope of improvement and we should instill in the parents and other members of the family the necessity of long, self sacrificing and tedious attention to the treatment of the child.

It is certainly to be hoped, and probably to be expected, that some serum therapy will soon be discovered in this age of medical miracles which will, when administered early, cure the children visited by this terrible affliction, and better still we may live in the hope of seeing its cause discovered and its prevention thus largely secured.

EDITORIAL.

A BUSINESS TALK.

The Journal owes an apology to its subscribers for the frequent delays which have occurred in its time of appearance, and the management now offers its apologies with the hope that they will be satisfactory. But at the same time we feel that not all the fault lies on our side—there is much that you can do to aid us in getting things in shape for each monthly issue and we are calling on you to help us in every way you can. We don't want to make this a one-horse or a one-man paper, but wish to have every physician in South Carolina pulling for it and with it and using his influence to better it in every way possible. We need the best material that each Society can offer for original articles; we need the courage of your moral support, and we need financial support by the profession as well.

By this we are not asking you to go down into your pockets and dig up the coin—the subscription price of the Journal entitles you to what we can give in the paper—but we do want you to try and induce more advertisers to use our pages. With the numerous hospitals, private infirmaries, drug supply houses, health resorts, mineral springs, etc., throughout the State, it would seem that some of you would be able to send, or influence for us, some of them to place advertisements in our pages. We are endeavoring to keep clean and ethical all the pages of the Journal. We have made no show or fuss about so doing, though it has cost us much money to curtail our ads. And now we ask you to support us by looking out for further ads. and sending them to us.

Again, you might aid us in keeping the good will of our advertisers by letting them know occasionally that you are getting something which you saw advertised in the Journal of the South Carolina Medical Association; they would then know that the money they have spent was not in vain, and might be willing to continue to place their ads with us; whereas should they never hear of the Journal from any of you, their natural inference would be that they are wasting money by advertising in our Journal. Besides, anything which is advertised with us comes up, as far as we can ascertain, to the claim made for it, and so is worth consideration and use. Now the Journal is not a money making proposition—we are not putting any surplus in the bank at interest by any means. We are trying to give you your full money's worth with every issue and frequently have to scratch our heads to make the various ends meet. We are going to all this worry in order to give you a high class paper instead of a cheap one and are counting on your appreciating our endeavors enough to use your influence in turning business our way, both by sending us new subscribers and new ads., and by helping us to keep the old ones. If you want the standard of the Journal kept up and raised you can help to have it done by working for it.

Won't you help us?

AN EXPLANATION.

As to the letter you got from the Secretary—a word of explanation might not be amiss here, especially as a slight error crept into the resolution as it was printed and mailed to

you for your vote. The postal authorities in Washington are holding the various publications down rather strictly to the law relative to the transmission as second and third class matter through the mails. As third class matter costs much more than second class, (four or five times as much), it would be a big saving for us could we get second class rates. In order to comply with the law, we must make a change in our by-laws which change is outlined in the resolution mailed to you with one exception—the last sentence must be left out, so that the resolution will read as follows:

AMENDMENT TO BY-LAWS.

The annual subscription to the Journal of the S. C. M. A. shall be $2.00. The price to members of the S. C. M. A., however, shall be $1.00 per annum. Members of the State Association who do not desire to subscribe to the Journal shall pay annual dues of $2.00. Those desiring the Journal shall pay $3.00 a year.

In other words, subscription to the Journal must be optional. We hope that you will vote for the amended or rather curtailed rule, and that you will do so very soon, or else the Journal will have to forfeit a very considerable sum of money; and the Journal needs the money.

THE COUNTY SECRETARIES.

Now, as to the County Secretaries —they are not speaking for themselves as well or as frequently as was to be hoped. A glance at the list published each month will show that many of the counties are not responding to the call of the Journal for frequent reports. The fact that the Secretaries have failed to take an interest in our work hampers us a great deal, for we wish to make this a paper of interest to all members of the profession within the State.

It is a matter of deep chagrin to the Editor that so little interest is manifested by the various Secretaries, for it is to them that he looks for his information as to what is doing throughout the State. Besides, the amount of material which comes to his hands for publication is not nearly large enough, though much good material originates in the various county and district meetings. If you want to help to make your paper a good one, don't forget it every time there is something of interest in your county. It speaks well for the modesty of so many of our men that they feel as if they have produced nothing worthy of publication, or else it speaks very well for the standard of the Journal that they do not consider the children of their pens good enough to appear in its pages—if that be the reason—but we fear that the real reason lies between indifference, diffidence, and an impression that their productions would be wasted on this publication. For Heaven's sake get over any such ideas, and send your papers in to the Journal and let us decide if they are available to us or not. Don't let your innate modesty prevent your getting into print, and don't forget that if you want a good Journal you must help to make it so.

And the County Secretaries have the same load to bear—they owe it to their paper that they keep it in touch with medical affairs throughout the State; that they stir up interest in their members and remind them to send their articles to the Journal. One letter a month is not much to write, and each county secretary could surely do that much for the benefit of the rest of the State.

THE SIMS MEMORIAL FUND AGAIN.

Pretty soon the Legislature meets and we are to request an appropriation to bear part of the expense of erecting a monument to Marion Sims, one of the greatest of Carolina's great sons. The question now is whether we are going to do our share or not. It is most decidedly up to us to raise the $5,000, (one-half of the total cost of the monument), which we have undertaken to raise. Before we can ask the law makers to expend $5,000.00 of the State's money, we should certainly show them that the medical profession think enough of their fellow-practitioner to go down into their own pockets for a little money.

This business of asking some one else to pay out money for a purpose for which we ourselves do not care to pay it is decidedly distasteful, and we should not be willing to make such a request unless we bear our share of the burden. Let us then start in by digging up the coin ourselves and taking it to the men appointed to make the collection, and not wait until we are dunned several times and then give grudgingly. In honoring Sims, we are honoring ourselves and are erecting a monument to the medical profession as much as to the man himself. God knows we are proud of the man, and the great pity of it all is that he is not here now for us to tell him about it. But as he is not here, the next best thing we can do is to erect some suitable memorial which may act as an incentive to others who are going through like struggles to those he made before attaining success.

"Let those who have much to give, give plenteously, and those who have little, of the little that they have."

SUCCESS.

In considering what constitutes success, we are faced with a rather large problem, for success is only a relative term and varies with many conditions. For instance, the man who is a success financially may be a failure in his home life; the man who fails in his business may still be successful in his uprightness and honor. None of us succeeds in attaining all of our dreams or ideals, none reaches the perfect pinnacle of attainment, but no man is a failure as long as he keeps up the fight and does the best he can do. J. Marion Sims is an example of one who by long endeavor finally attained recognition of his success in spite of many disappointments. While few of us can hope to attain the height that he attained, we can each do our best and remember that a successful man is one who has done the work which came to his hand and done it to the best of his ability, whether with or without hope of reward or thought of repining.

Remembering this, we can comfort ourselves and keep on doing each day what comes to hand to do. Even though the world count us as failures, the sense of having done our devoir, should comfort us and make us feel that after all success will not be measured in dollars and cents when the great reckoning is made, but in accomplishment of what was given us to do.

THE BUGABOO DOCTOR.

It is not infrequent for the doctor on being called to see some little patient, to find a terror-stricken child, crying and absolutely rebellious against examination. On such occasions he is usually met with a tale like this: "Doctor, I don't know what can be the matter with Jennie, (or Willie, as the case may be). I've never known the child to act like this before, she generally takes so readily to strangers, and I don't know why she should act so." Meanwhile the doctor is

worrying over what there could be about himself which should so strike terror to the little one's heart. He is fond of children and has usually found children fond of him. He feels that the old saying that children and dogs are quick judges of character is true, and wonders when he could have developed traits which would render him an object of dread to any child. At the same time the mother becomes conscious of a feeling of doubt as to whether her confidence in the doctor has been misplaced or not, for she is imbued with the same idea about children and dogs as judges of character. Meanwhile the examination of the patient has been hampered, the child resists every advance, inspection is difficult; the child keeps its eyes shut, its teeth clenched when the attempt is made at examination of mouth and throat. Palpation of chest and abdomen is useless for the abdominal muscles are rigid and the constant sobs prevent any proper estimation of the respiratory movements. Auscultation is equally useless for the constant cries of the child prevent good work. And the ultimate result is a snapshot diagnosis based on the veriest guess from what information the now excited mother may furnish.

Now, the chances are that the whole fault lay in the fact that the doctor had been used as a bugaboo to scare the child with at various times, and the child had gotten to associate the doctor with the bogey man in his imaginings. It is most unfortunate that so may people use the physician as bogey man to strike terror to the children. "Mind now, if you are not good, I'll send for the doctor and he'll cut your head off," or "I'll make the doctor give you some nasty medicine if you don't be good." Thus the child acquires a dread of one of his best friends and the physician finds his work hampered when he is called in.

It is a good thing once in a while to come down hard on people who are guilty of such bad practices. Each one of us can save himself considerable trouble and our patients even more if he could put a stop to all such foolishness on the part of parents and nurses whenever it happens in his experience. The practice is common, unfortunately, and the result is loss of both time and efficiency.

SOCIETY REPORTS.

Abbeville, no report, 6th month.
Anderson, no report, 7th month.
Aiken, no report, 2d month
Bamberg, no report, 5th month.
Barnwell, no society.
Beaufort, no report, 5th month.
Charleston.
Cherokee, no report, 3d month.
Chester, no report, 5th month.
Clarendon, no report, 5th month.
Colleton, no report, 4th month.
Darlington, no report, 7th month.
Dorchester, no report, 7th month.
Edgefield, no report, 7th month.
Fairfield, no report, 7th month.
Florence, no report, 7th month.
Georgetown, no report, 3d month.
Greenwood, no report, 7th month.
Hampton, no report, 7th month.
Horry, no report, 5th month.
Kershaw, no report, 7th month.
Laurens, no report, 5th month.
Lee, no report, 7th month.
Lexington, no report.
Marion, no report, 3d month.
Marlboro, no report, 7th month.
Newberry, no report, 3d month.
Oconee, no report, 3d month.
Orangeburg, no report, 7th month.
Pickens, no report, 3d month.
Columbia, Richland Co.
Saluda, no report, 7th month.
Spartanburg.
Sumter, no report, 7th month.
Union.
Williamsburg, no report, 7th month.
York.

RICHLAND.

On November 14, 1910, the Columbia Medical Society held its regular monthly meeting in Dr. J. J. Watson's office with the president, Dr. S. E. Harmon, in the chair.

The following members were present: Drs. W. C. Abel, J. W. Babcock, Mary R. Baker, D. S. Black, A. Earle Boozer, W. A. Boyd, G. H. Bunch, T. M. DuBose, S. B. Fishburne, R. W. Gibbes, S. E. Harmon, C. L. Kibler, A. B. Knowlton, P. V. Mikell, J. J. Watson, C. F. Williams, Ernest Cooper and C. E. Owens.

Dr. A. B. Knowlton reported an interesting case of death of fetus, due to an unusual cause, namely, twisting of the cord before movement of the fetus per se.

Dr. J. J. Watson reported a case of hysteria in a man, one of the unusual symptoms being feigned insanity.

Hysteria was freely discussed, the following members reporting interesting cases: Drs. Babcock, Harmon, Knowlton, Williams, Mikell and Gibbes.

Dr. J. W. Babcock read a very interesting historical sketch of pellagra. Dr. Babcock, upon request, gave an account of how his attention was first directed to the study of the disease.

He also read a translation of an Italian paper on Pellagra.

Routine business was transacted and the Society adjourned.

MARY R. BAKER,
Secretary.

PICKENS.

The Pickens County Medical Society met November 5, 1910. The president, Dr. Sheldon, called the meeting to order. The minutes of the last meeting were read by the secretary and approved. Drs. Clayton, Shirley, Woodruff, Bolt, Valley and Pander were absent. Dr. Gilliland read a paper on the treatment of typhoid hemorrhage as complication of typhoid fever. The paper was freely discussed by Drs. Tripp, C. N. Wyatt, H. E. Russell and Allgood. Dr. Sheldon reported a fatal case in Dr. Allgood's practice, of a child five years old. Diagnosis not certain; the child had symptoms of cerebro-spinal fever, but microscopic examination failed to confirm the diagnosis. Flexner's serum was used.

SPARTANBURG.

Spartanburg, S. C.

The Spartanburg County Medical Society held its November meeting on the 22d. Dr. James H. McIntosh, president of the State Medical Association, was the guest of the Society and read an admirable paper, pointing out the importance of a good County Society. The sentiments of Dr. McIntosh, as expressed in this paper, were endorsed by the society and he was requested to allow it to be published in the State Journal. Dr. J. J. Lindsey reported the successful use of the injection of typhoid bacteria in a case of typhoid fever in which the temperature could be kept down to 103 degrees only by ice baths; the day after the injection the temperature commenced going down and on the fourth day was normal and remained so. This meeting of the Society was more largely attended than any previous meeting of the year, the following members being present: Drs. A. M. Allen, H. R. Black, S. F. Blakely, W. W. Boyd, G. A. Bunch, W. H. Chapman, Fike, Gantt, Gibson, Hunter, Jefferies, Kelly, S. T. D. Lancaster, Lindsay, Patton, Potts, Sexton, A. C. Smith, D. L. Smith, W. A. Smith, D. H. Smith and James R. Sparkman.

L. ROSA H. GANTT,
Secretary.

UNION.

Officers: President, Theodore Maddox, M. D.; First Vice-President, H. T. Hames, M. D.; Second Vice-President, O. L. P. Jackson, M. D.; Secretary and Treasurer, R. R. Berry, M. D.; Delegate to South Carolina Medical Association, S. G. Sarratt, M. D.

Regular meetings every Monday night at 8 P. M.

Programme: Regular order of business, Reading of papers, Discussion, Report of Clinical Cases, Quiz Course, Business, Adjournment.

December 5: Fractures, Dr. J. H. Hamilton.

December 12: Rheumatism, Dr. O. L. P. Jackson; subject unannounced, Dr. M. W. Chambers, Jonesville.

December 19: Present status of Serum Therapy, Dr. T. P. Kennedy.

December 26: Pellagra, Dr. Theo. Maddox.

YORK.

Yorkville, S. C., Nov. 18, 1910.

The York County Medical Society held its regular meeting at Rock Hill on November 8th. As this was the regular time for the election of officers for next year, the election was entered into with the following results: Dr. J. I. Barron, President; Dr. W. G. Stevens, Vice-President; Dr. W. A. Hood, Secretary and Treasurer. Dr. J. R. Miller was elected censor to take the place of Dr. Dulin, whose term of office expires this year. Dr. M. J. Walker and Dr. W. W. Fennell were elected delegates to the annual meeting of the S. C. Medical Society.

After the election, the Doctors went to Dr. Fennell's hospital, where Dr. J. R. Miller operated on a patient's eyes for the benefit of those present as well as the patient. Here we went in to see Dr. Younge, one of our most enthusiastic members, who was sick and could not meet with us. I am glad to say that we found him greatly improved.

Several cases of interest were shown us while at the hospital, after which the visiting physicians were taken to dinner by the physicians of Rock Hill.

One matter of importance that I overlooked is the stand that the Society is taking against the illegal practice in our county. Two cases were reported and our committee, Dr. Walker, was asked to push them.

Alternates to South Carolina Medical Association elected—Drs. W. A. Hood and T. N. Dulin.

JNO. I. BARRON,
Secretary.

CURRENT LITERATURE.

PRESENT STATUS OF THE COLON TUBE.

BY H. WELLINGTON YATES, M. D.

(The Am. J. of Obstetrics and Diseases of Women Nov., 1910.)

Unquestionably a great difference of opinion obtains as to what one can do and cannot do with the colon tube. The early interpretation of its utility depended upon the tube's passing through both rectum and sigmoid into the colon and thence upward. Until recent times, the greater majority of Englishmen, Frenchmen and Americans have concurred in this belief. Later experiments all give the same deductions—namely, that given a normal individual, seldom, if ever, does the colon tube pass up to the descending colon. Deaver (1903) states that the flexible tube can be passed into the colon, and as a proof of this, says that when the tube is being passed, if water is permitted to run through it simultaneously, this is a key as to

the certainty that the tube enters the colon. Indeed, I believe that there is now a large majority who hold to this last statement. The sole purpose in attempting to pass the ordinary rectal tube into the colon has been to carry fluid directly to that viscus for the purposes of food absorption or ablution. I think that we can substantiate by our skiagraphs that these premises are wrong, that it is unnecessary, unwise and mischievous.

OBSERVATIONS AND CONCLUSIONS.

1. Seldom, if ever, are soft-rubber tubes admitted into the normal colon.

2. When an endeavor is made to force the tube upward, even by the gentlest manipulations, it is found to coil itself up in the rectum and there do positive harm because of pressure, irritation and the consequent inability to retain the enema.

3. In perhaps half the instances it is impossible to tell when the tube is coiling upon itself, even when we suspect it.

4. Colon tubes are of no value because they do not reach the colon, and they are mischievous in that proportion as we endeavor to force them up higher.

5. Water or fluid injected four or five inches into the rectum is carried upward into the colon and may be found at the cecum in ten minutes.

6. There is good reason to believe that a reversed peristalsis is set up when fluids are injected into the rectum.

7. The introduction of a tube more than five inches for colonic irrigation or therapeutic enemata is useless and likely to defeat the object desired.

CHEMICAL PROBLEMS IN DIABETES.

BY ADOLPH MAGNUS-LEVY, M. D.
(Medical Record, Nov. 19, 1910.)

By glyconeogenesis is understood a formation of carbohydrates, and especially of grape sugar, from molecules which are not themselves carbohydrates, for instance, from protein or fat. All the experimental procedures for the recognition of glyconeogenesis in the animal body involve the same suppositions and may be traced back to a simple algebraic equation—the total mass of carbohydrates present in the body, and secondly, the quantity of carbohydrates introduced during the experiment. Five different procedures have been employed for the recognition of glyconeogenesis. The classical method for the recognition of glyconeogenisis is the fourth method; the examination of diabetic subjects. Besides this classical method there is still a fifth to be mentioned, viz: the examination of the artificially transfused liver. The first experiment for the recognition of a sugar formation from fat in men was carried out by Rosenquist; the formation of sugar from fat is still completely unproved. The question of sugar formation from protein is to be reduced to the question of the different aminoacids. If, with a certain reserve, we may rely on these investigations of the different authors, their results may be generalized as follows: It appears that aspartic acid, glutaminic acid, alanin, and also glycocoll are sugar producers, while leucin and tyrosin are not.

THE USE OF THIOSONAMIN IN THE TREATMENT OF CICATRICIAL FORMATIONS FOLLOWING BURNS.

BY J. EWING MEARS, M. D.
(Medical Record, Nov. 19, 1910.)

Thiosinamin was introduced into medicine by von Hebra (*Internat. klin. Rundschau*, September, 1892) and the following interesting statement is made with regard to its action and uses: "It exerts no influence upon the general system, its action is directly upon the blood-making organs. Several hours after injection the leucocytes in the blood are greatly diminished in number, falling, according to von Hebra, from 14,000 to 4,000. This condition lasts but a short time, followed by a pronounced hyperleucocytosis, during which a marked destruction and absorption of exudates, of cicatrical, and other poorly nourished tissues occur. It has been used by clinicians in the treatment of lupus, old cicatrices, chronic glandular inflammations, keloid, urethral strictures, corneal opacities, and sclerotic conditions of the ear with consequent deafness, fibrous tumors, syphilitic lesions, and smallpox scars. It may be administered internally in capsules in one-half to three grain doses. Locally it may be applied in soap or plaster, five to twenty per cent. It may be injected hypodermatically one to four grains in alcoholic solution, preferably in the intrascapular or gluteal region. In overdoses it produces toxic effects. Care should be taken to obtain the pure drug and that only which is dispensed by reliable pharmacists.

NEW YORK ACADEMY OF MEDICINE.

Section on Pediatrics. Stated Meeting, Held October 13, 1910. Dr. Eli Long in the chair.

Report on the Use of Ehrlich-Hata Preparation for the Cure of Syphilis.—Dr. Herbert Budington Wilcox presented a girl, twelve years old, who was first seen at the Bellevue clinic suffering from periostitis and muscle pains of syphilis in November, 1909. After some weeks' treatment in the children's ward she returned to the clinic and was under weekly observation until August, when she developed a keratitis with severe inflammation of the entire eye, considerable hemorrhage, and marked photophobia. Under the usual treatment there had been no improvement at the end of two weeks; then Dr. M. S. Kakels injected three decigrams of Ehrlich's 606. In twenty-four hours the evidences of acute inflammation had almost subsided. The photophobia was correspondingly diminished. In the six days following the exudate and hemorrhage were rapidly absorbed and now the cornea was nearly clear. There was considerable pain and swelling at the site of the injection for forty-eight hours. The temperature rose to 101 degrees F. on the second day, and was normal on the fourth day. The urine was examined daily and was negative throughout. There was a leucocytosis of 20,000 on the second day; this dropped to 12,000 on the fourth day. The Wassermann reaction showed a gradual reduction in intensity, being very weak at present. This patient illustrated the remarkable effect of the preparation of Ehrlich's on an acute inflammation, due to the syphilitic poison. As illustrative of the action of the drug in clearing up products of inflammation, Dr. Wilcox reported the case of a boy nine years old, who had a double keratitis which left him with barely light perception. He was sent to Bellevue for treatment. He was given three decigrams of Ehrlich's 606 and had no local reaction. The urine remained normal. The temperature rose to 101 degrees F. on the second day. There was a leucocytosis of

15,000 for two days. On each of the six days following the injection there was noticeable lessening of the opacity in both eyes and at the end of ten days he was able to distinguish small objects at a distance of five feet. The first patient gained eight pounds in two weeks following the injection. No record was kept of the weight of the boy.

A Case of Hereditary Syphilis.—Dr. Charles Herrman reported this case. The mother had been injected with Ehrlich's 606. The patient was a baby at the breast and received the supposedly curative substance in the mother's milk. He said that several cases had been treated successfully in this way by German physicians. Thus far, six days after the injection, the patient had not shown any distinct signs of improvement. It was extremely important that cases of hereditary syphilis should have breast milk. It had been suggested that in cases in which the mother was unable to give the breast a syphilitic wet nurse should be injected with 606 and the baby nursed at her breast.

Dr. Alfred F. Hess reported three cases of hereditary syphilis treated with Ehrlich's preparation; in all disagreeable local symptoms developed after the injection into the buttocks. In one instance, a miserable marantic child developed necrosis six weeks after the injection. The children all had temperatures. The syphilitic symptoms disappeared. The injections were made by an experienced man and the solutions were neutralized.

THE PRESENT STATUS OF ABDOMINAL CESAREAN SECTION.

BY GEORGE BEN JOHNSTON, M. D.
(The Old Dominion Journal, Nov., 1910.)

The exact date at which abdominal Cesarean section was performed on the living woman is not definitely known, the first monograph on the subject appearing in 1581. The present day practitioners must not consider abdominal Cesarean section as a "dernier resort," but recourse should be made to it in every case where other methods of delivery will subject mother or child to a greater degree of hazard. Among the relative indications eclampsia stands out pre-eminent. In the case of monsters or hydrocephalus, mutilation of the foetus is perhaps allowable to secure its removal, but even here Cesarean section offers a better outlook for the mother.

THE PROBLEM OF VISCEROPTOSIS (GLENARD'S DISEASE).

BY GREER BAUGHMAN, M. D.
(The Old Dominion Journal, Nov., 1910.

If you will go into the first saloon of the Tuscan School just off the Tribuna, in the Ufizzi Palace, when you go to Florence, Italy, and look at Sandro Boticelli's (1477-1510) Calumny, you will find a splendid clinic of Glenard's Disease. Among other pictures by the old masters that show the same conditions Hubert van Eyck's Eve, which was a part of the famous tryptic entitled "The Adoration of the Lamb," painted about 1420 and believed to be the first example of oil painting.

Truth in Boticelli's Calumny and Eve in van Eyck's Adoration of the Lamb are nude and standing, showing the long coupling, the thin epigastric region, and the distended hypogastric region characteristic of Glenard's Disease. These pictures show that visceroptosis existed in olden times, and demonstrates how cases should be examined with chest and abdomen bare, so as to get the proper idea of their contour. Such men as Virchow,

Morgagni Aberle, Rayer and others described this displacement but Glenard's name was given to the disease because of his classic paper describing his experiences with the sick people that visited Vichy. Visceroptosis means the displacement of the abdominal viscera; the heart is sometimes prolapsed. Glenard believed that in visceroptosis he had found an anatomical basis for one of the forms of nervous dyspepsia.

Einhorn, whose practice is largely devoted to digestive disorders, reports that 6.5 per cent of his males, 33.25 per cent of his females have enteroptosis. Glenard reports 2.7 per cent. among male, 22 per cent. among women. Symptoms of visceroptosis vary from none at all to the very serious pain of Dietl's crisis.

PRIMARY (CONGENITAL) HYDRONEPHROSIS.

BY CHARLES GREENE CUMSTON, M. D.
(Annals of Surgery, Nov., 1910.)

Congenital, or speaking more correctly, primary hydronephrosis is not what may be termed infrequent, while the acquired form is very rare in children. The latter may be the result of ureteral compression by a malignant tumor, by adhesions resulting from a tuberculous peritonitis, or an hydatid cyst of the under surface of the liver. Uric acid sand has been said to be the most frequent factor, causing obstruction of the lumen. The primary or congenital type is nearly always due to malformation of the ureter, such as absence or stricture of the tube. In female children a large primary hydronephrosis might be mistaken for an ovarian cystoma. Rectal or vaginal examinations will make the diagnosis of ovarian cyst certain. Very often a differential diagnosis between a hydronephrosis and a congenital cystic kidney can hardly be made. In typical cases when the hydronephrosis is not due to the closing down of a ureteral stricture, we may get characteristic symptoms, such as the occurrence of renal colic, intermittent polyuria which results in a decrease in the size of the swelling. No single operative interference can be applied to primary hydronephrosis in children. I believe that nephrectomy should be done when possible, preferably by the extraperitoneal lumbar route. Nevertheless, many operators are not of this opinion and prefer nephrotomy. If a portion of the renal parenchyma can be saved I believe that nephrotomy, followed by drainage, is justifiable, but when the secreting portion of the kidney has been destroyed, primary nephrectomy should be undertaken.

IS THE SAC OF A FEMORAL HERNIA OF CONGENITAL ORIGIN, OR ACQUIRED?

BY R. W. MURRAY, F. R. C. S.)
(Annals of Surgery, Nov., 1910.)

Femoral hernia is seldom met with before adult life, still a number of cases has been recorded in which the hernia appeared during childhood; and others in which it was present at birth or noticed during infancy. We have recorded 104 cases of femoral hernia occuring in children under fifteen years of age. In fifty-two of these cases the hernia first appeared between one and ten years of age, and in nine instances it was first noticed before the children were five years old. The relative frequency of femoral hernia in male and female children, is about one to two. Femoral hernia is so frequently met with that if its essential cause is the presence of a preformed sac, then we would expect to find small peritoneal diverticula occupying the crural

region altogether apart from hernia. Clinical evidence is strongly in favor of the belief that in a number of cases the sac of a femoral hernia is preformed, and is, therefore, the essential cause of hernia. Granted the presence of a diverticulum, the descent of the bowel would depend, as in the inguinal or any other reigon, upon the size of the mouth of the sac. If the sac is a relatively large one, then the hernia may appear during infancy or childhood; if, as is more usually the the case, the sac is at first small, then the bowel is not able to enter it, until with the growth of the individual it has attained a certain size. Evidence obtained from pathological laboratory, operative experience, etc., are strongly in favor of the view that the sac of a femoral hernia is of congenital origin and not acquired.

STATISTICS OF CANCER IN THE FEMALE.

BY K. I. SANES, M. D.
(Am. Journal of Ostetrics and Diseases of Women. Nov., 1910.)

To get reliable statistics on such a subject as cancer it is not only necessary to see that the information obtained on this subject is accurate, but also that it is extensive enough to avoid errors of chance. With this in view, we collected data bearing on the question of cancer from the mortality reports of the United States Bureau of Census covering a period of eight years, from 1900 to 1908. To get hospital statistics we communicated with 604 leading hospitals in this country and Canada.

TABLE I.

DEATH RATE OF CANCER IN GENERAL.

According to the registration area:	
Total Mail deaths	2,405,737
Total female deaths	2,065,505
Male deaths in past 35 years	1,257,635
Female deaths in past 35 years	1,082,794
Total male deaths from cancer	71,939
Total female deaths from cancer	116,210
Male deaths from cancer past 35 years	67,685
Female deaths from cancer past 35 years	110,375
According to 219 hospital reports:	
Male cancer cases	2,754
Female cancer cases	5,469
Cases unclassified as to sex	4,405

The above cited figures show that the proportion of deaths from cancer to the total number of deaths from all causes, are in females 1 to 17.7; in males, 1 to 33.4. Taking the relative frequency of cancer in both sexes, we find 62 per cent. of those that die of cancer are females, and 38 per cent. males. We see then, that cancer is an exceedingly common disease in the female and it is met with twice as frequently in females as in males. The female sex leads in number of cancers of breast and sexual organs, while the male sex leads in number of cancers of mouth and skin. Cancer of the intestines are about equally distributed between both sexes, and in cancer of the stomach both sexes are about equal in number, according to the U. S. Census statistics. Cancer of the female sexual organs is the largest group in hospital cancer statistics. The mouth group constitutes 1 per cent of all hospital cases. Skin group constitutes 2 per cent. of hospital cases. Among the colored race 14.5 per cent. less reach the cancer age than than does the white race, chiefly due to prevalence of tuberculosis.

WHAT IS THE DIRECT CAUSE OF THE SEIZURES OF EPILEPSY?

BY NATHAN P. LEVIN, M. D.
(N. Y. Medical Journal, Nov. 19, 1910.)

Epilepsy is generally classified in the text-books under the heading of functional diseases of the nervous system. By a functional disease, we mean

one whose anatomical and pathological basis is unknown. We do not know the anatomicopathological basis of epilepsy, though we are unanimous in the belief that it is to be sought in the brain. Granting then, that pathological changes do occur in the brain of epileptics we are forced to the conclusion that these changes, whatever they are, must be exceedingly transitory, appearing and disappearing with the epileptic seizure; for post mortem observation upon epileptics, unless the cases had been of long standing and degenerative changes had set in, has failed to demonstrate any brain lesions sufficient to explain the symptoms.

There is a class of affections occurring in different parts of the body characterized by attacks, sudden in their onset, and equally sudden in their disappearance. This class includes such varying conditions as asthma, hay fever, angioneurotic, oedema, urticaria, and, as Strumpell would have it, colica mucosa. These conditions are all manifestations of what the Germans call the "exudative diathesis." These affections are the result of angioneurotic phenomena, which are brought on by a constitutional irritability of the nervous system—neuropathic heredity if you will.

Now I take it that vascular phenomena precisely similar to those occurring in asthma, or angioneurotic oedema, occur in the brain with each epileptic seizure. If sudden exudations can occur from the vessels of the skin, bronchi, intestines, why should they not occur in the viscera, in the brain? The violent symptoms occurring during an epileptic fit are explained by the sudden increase in the intracranial pressure entailed by this exudation within the rigid unyielding walls of the skull, As soon as the pressure within the cranium has re-adjusted itself the symptoms will pass off.

Since, according to this theory, each epileptic seizure is associated with an increase of intracranial tension, it has occurred to me that possibly a decompression operation as practiced by Cushing would be of serviec in this disease. To remove a good section of the cranial vault is such a simple procedure that it is worth trying on many epileptics. By removing a portion of the unyielding skull and substituting instead an expansile diaphragm in the shape of the scalp we will allow of quicker adjustment of intracranial tension, and thus, perhaps, diminish the frequency or severity of epileptic seizures.

HEART DISEASES.

What Heart Diseases Form a Contra-indication to the Use of 606?—Grassman acknowledges that this question cannot be answered positively yet, but points out that many heart leisons, particularly those of a syphilitic origin, are not contra-indicative.

Techinque and Doses of the Soluble Injections of 606.—Duhot rubs up 606 in a small glass mortar with 1-2 c. c. of pure methyl alcohol and then adds from 4 to 6 c. c. of physiological salt solution according to the dose. This he injects by means of a syringe with a platinum needle, from 2 to 4 cm. long. In order to find the best place for the injection he draws a line from the anterior spinous process of the ilium to the apex of the fold between the buttocks and chooses a point between the upper and middle thirds of this line. The patient is placed lying on his abdomen on the operating table, the needle is introduced and left a moment to see that it has not entered a bloodvessel, and then the injection is made slowly into the muscle. The needle is then withdrawn quickly and the tissue that has been held between the fingers is pressed back. The doses

Duhot uses are larger than those employed in Berlin and Frankfort. The average dose for a man not organically enfeebled weighing seventy kilogrammes, is one gramme, about 0.14 per kilogramme, with a maximum dose of 1.10 grammes. The average dose for enfeebled men is 0.01 per kilogramme, that for women a little less. The advantages claimed for this method of injection are that it is no more painful than injection of the emulsion in the back, that it never provokes suppuration or swelling, such as have been observed after use of the "insoluble method," that it seems to produce a more efficient and quicker action, and that the injections made in this way last five minutes and are without danger of infection.

HOSPITAL FOR HARTSVILLE.

CANVASS FOR PURPOSE OF RAISING FUNDS FOR ERECTION OF ONE PROVES VERY SUCCESSFUL.

(The State, Columbia, S. C., Nov. 16, 1910.)

A hospital for Hartsville seems an assured fact. Dr J. L. Powe, one of the town's youngest and most progressive physicians, after much thought and consideration began Saturday morning a canvass for subscriptions. By night $12,000 had been subscribed. Monday morning he continued the good work and by night $17,000 was the total. The people of the town and surrounding country are enthusiastic. Within the next few days a much larger sum may be reported.

There seems no doubt now that a hospital, and one in keeping with the town, will be built and that real soon. The other physicians of the town are co-operating loyally with Dr. Powe, and each feels a personal interest in the move.

DOCTORS MEET IN FLORENCE.

PEE DEE MEDICAL ASSOCIATION HOLD ANNUAL SESSION.

(The News and Courier, Charleston, S. C., Nov. 11, 1910.)

The Pee Dee Medical Association met in the parlors of the Hotel Florence at 11 o'clock, yesterday morning, with a larger attendance of members than had been hoped for.

The meeting was called to order promptly by Dr. William Egleston, of Hartsville, the president; and Dr. J. C. Lawson, of Darlington, the secretary and treasurer, was at his post of duty.

The routine of business was transacted and the following officers were elected for the ensuing year:

Dr. A. M. Brailsford, of Mullins, president; Dr. T. E. Wannamaker, of Cheraw, vice-president; Dr. J. C. Lawson, of Darlington, secretary and treasurer.

Florence was selected as the next and permanent place of meeting, and the second Wednesday in November, 1911, was the date.

The Association was entertained here to-day by the Florence County Medical Association, and a beautiful dinner was served the visitors at the Hotel Florence.

Among those in attendance to-day as guests of the Association, were Dr. B. R. Tucker, of Richmond Va., who made a most eloquent address on "Acute Anterior Poliomyelitis," and Dr. C. F. Williams, State health officer, of Columbia, who spoke on "The Status of Infantile Paralysis in South Carolina." Both of these addresses were masterpieces and the physicians present were not only interested, but considerably edified.

All of the visiting physicians returned to their homes last evening, after having spent a most pleasant as well as most profitable day.

The programme below was carried out with the exception of the paper which was to have been read by Dr. Frank H. McLeod, who was absent, being in Baltimore on account of undergoing a surgical operation for appendicitis. A telegram was received from his physician, however, and was read stating that he had been operated upon, had stood the operation well and was doing nicely to-day.

Programme Pee Dee Medical Association, Florence, S. C., November, 9 1910:

11 A. M. Meeting called to order by president, Dr. Wm. Egleston, in Hotel Florence parlors. Transaction of business.

11:30. Papers: Retroversion of the Uterus and its Surgical Treatment," Dr. F. H. McLeod, Florence, S. C.; "Health Education and the Need of Sanitary Work in the Country," Dr. A. M. Brailsford, Mullins, S. C.; "Malaria in the Pee Dee Swamps," Dr. E. C. Majors, Latta, S. C.; "The Treatment of Malaria Fever," Dr. R. C. May, Bennettsville, S. C.; subject unannounced, Dr. T. E. Wannamaker, Cheraw, S. C.; "Dystocia," Dr. L. F. Johnston, Dillon, S. C.

1 P. M. Adjournment for dinner.

2 P. M. "Acute Anterior Poliomyelitis,"Dr. R. B. Tucker, Richmond, Va.; "The Status of Infantile Paralysis in South Carolina," Dr. C. F. Williams, Columbia, S. C.; "Report of Two Cases of Infantile Paralysis in Georgetown County," Dr. T. R. Howle, Rosemary, S. C.

5 P. M. Adjournment.

ROPER HOSPITAL IMPROVING.

MISS AGNES ISSERTELL DOING GOOD WORK AS SUPERINTENDENT.

(The News and Courier, Charleston, S. C., Nov. 14, 1910.)

Under the able direction of Miss Agnes Issertell, the new and able superintendent of the Roper Hospital, that institution is making rapid progress in its journey towards a model hospital.

Miss Issertell assumed her duties at the Hospital about a month ago, after years of experience in New York and the vicinity. She is a graduate of the Mount Sinai Hospital in New York, but is a former resident of Charleston, and this had much to do with her employment here. She states that she finds the discipline good and the corps of nurses efficient.

Her hard work has, however, somewhat rejuvenated the appearance and methods in the Hospital, as she introduced many metropolitan ideas in the running of the place. Everything is running smoothly and the 110 patients who are now in the Hospital, exclusive of those in the Riverside Infirmary, are receiving the best of expert attention.

ANDERSON PHYSICIAN INJURED.

(The News and Courier, Charleston, S. C., Nov. 13, 1910.)

Dr. Henry C. McFall, a prominent farmer and physician, living near Anderson, was painfully injured about the face and hands this afternoon through the explosion of a tank of carbide, used in the lighting of his home.

TO PROPOSE PLANS FOR CITY HOSPITAL.

(The Greenville Daily News, Nov. 10, 1910.)

Probably the most significant gathering held in Greenville in some time will take place this evening, when the hospital association will convene in the rooms of the Board of Trade, for the purpose of adopting some definite plan whereby a modern hospital can

be established in Greenville. An unusually great amount of interest has been manifested generally in the movement, and it is highly probable that the meeting to-night will result in the way being opened for the establishing of the desired institution. While the meeting has been called by the hospital association, all of those who are interested in having a hospital in this city are cordially invited to attend and participate in the deliberations. It was stated yesterday by an official of the association that this is the crucial stage of the movement, and if anything worth while was to be accomplished it would have to be done at the meeting to-night. Indications yesterday pointed to the gathering this evening being one of the largest attended and most enthusiastic sessions of the general public held here in some time. The meeting will be called to order promptly at eight o'clock, and will be brief.

TO UNDERGO OPERATION.

DR. FRANK H. McLEOD LEAVES FOR BALTIMORE HOSPITAL.

(The News and Courier, Charleston, S. C., Nov. 9, 1910.)

The many friends of Dr. Frank H. McLeod, throughout this section and the State will be pained to learn that he was taken to John Hopkins for an operation for appendicitis.

His condition grew alarming yesterday afternoon and he left on the first train for Baltimore, accompanied by his wife and Dr. D. H. Smith, of this city.

Dr. McLeod is proprietor of the Florence Infirmary, which has gained no little attention from the public within the last year, on account of the great number of patients that have been brought here from far and near for treatment under Dr. McLeod's personal services and his illness will cause no little sorrow among the hundreds of patients who have been treated in that institution. It is hoped that he will stand the operation well, and will soon be back in charge of his large practice of medicine and surgery.

DR. ORR BURIED IN GAFFNEY.

SPARTANBURG PHYSICIAN TAKEN TO OLD HOME FOR INTERMENT.

(The News and Courier, Charleston, S. C., Nov. 10, 1910.)

Dr. J. D. Orr, who died in Spartanburg last Saturday evening, was buried at Oakland Cemetery in this city, Monday morning, at 11 o'clock. The body was brought here on train No. 41, and carried direct to the cemetery from the depot. Dr. Orr at one time lived in this city, and had hundreds of friends here. The Rev. Dr. J. S. Watkins, pastor of the First Presbyterian Church, of Spartanburg, conducted the services at the grave. The floral offerings were beautiful and very profuse. The large number of friends present at the interment was a token of the high esteem and regard in which Dr. Orr was held in this city.

BELOVED PHYSICIAN OF ALLENDALE DIES IN FIFTY-FOURTH YEAR.

(The News and Courier, Charleston, S. C., Nov. 25, 1910.)

Dr. Clarence W. Erwin died early to-day at the home of his brother, Mr. T. R. Erwin, in the fifty-fourth year of his age, after an illness of several months.

The death of Dr. Erwin is a distinct loss to this community, and the lower part of Barnwell County, where in the capacity of a physician and the

good Samaritan, he has administered to the sick and to the needy for thirty-two years. No death in this community could more be deeply deplored.

The deceased was the eldest son of the Rev. J. D. Erwin; his mother, before marriage, was Miss Laura A. Raysor. At an early age he joined the Christian Church, he was made a deacon, and for many years served as secretary and treasurer of the Christian Church for South Carolina, and devotedly served as superintendent of Antioch Christian Church the greater part of his life. In benevolent work, too, he was prominent, being a Mason, a Knight of Pythias, and a member of the Knights and Ladies of Honor, of which he was secretary and treasurer.

In every good work he was a leader. In the church and in the private walks of life he portrayed the ideal Christian gentleman of the old school.

In 1878 he graduated at the Charleston Medical College, with distinction. In 1878 he was married to Miss Caroline Sams, of Ervinton, S. C. In 1903 he was left a widower and childless. Both Dr. Erwin's father and grandfather were eminent physicians.

At a joint meeting of committees from the County Medical Society, City Council and the Hospital Association, held yesterday afternoon in the office of Mr. J. E. Sirrine, relative to the acquiring a city hospital in some other way, either by building one or buying one, a committee was appointed to confer with the owner of the Corbett Home and see what would be the lowest figure at which the Home could be purchased and what terms could be made, see what a lot could be bought for and a hospital suited to the needs of the city could be erected and report back to the committees.

This committee, it is understood, will discharge their duties at once, and will make their report at the earliest possible moment. When that is done it is believed that the matter of the city hospital will be in more tangible shape than ever before.

Thursday afternoon a committee from the County Medical Association met at the Corbett Home and went over the building with the view of ascertaining just what changes would have to be made before that structure would be suited to the needs of a city hospital. After the committee had finished its work a committee was appointed to meet with the committee from the City Council and the committee from the Hospital Association yesterday afternoon.

MEETING OF FOURTH DISTRICT MEDICAL ASSOCIATION.

(The Greenville Daily News, Nov. 22, 1910.)

The meeting of the Fourth District Medical Association, held yesterday in the rooms of Board of Trade, was attended by several score members of the organization from all the counties represented in the association. The exercises attendant upon the gathering continued until after three o'clock in the afternoon when the members repaired to the Blue Ridge Hotel and feasted upon a sumptuous dinner which had been prepared for them by the local members of the association. Practically all out-of-town members returned to their homes last evening.

The meeting was called to order by the president of the association, Dr. W. A. Tripp, of Spartanburg. Dr. Z. T. Cody, pastor of the First Baptist church, made the invocation, while Mayor Marshall followed with an address of welcome. The address of welcome to the physicians was responded to by President Tripp.

With the preliminaries over, the program prepared for the occasion by Dr. E. W. Carpenter, secretary and treasurer of the association, was

taken up. A number of distinguished physicians were present, and some of the most popular scientific topics of the day were discussed.

The first address was on the subject of Pellagra. Dr. G. A. Neuffer, of Abbeville, a recognized authority on this subject, delivered an address which was both interesting and beneficial. Dr. A. D. Cudd, of Spartanburg, spoke at some length on the subject of "Surgical Interference and Irrigation of the Colon in the Treatment of Pellagra." Dr. J. H. McIntosh, president of the State Medical Society, made an interesting talk on the subject of "A Plea for the More Energetic and Rational Care of the Insane."

Other interesting addresses were made on the following subjects and by the following members of the organization.

Essayist Greenville County Medical Society, Dr. W. B. Sparkman.

Some remarks on the Hyperaemic Treatment, with Case Reports, Dr. G. E. Thompson, Essayist for Spartanburg County Society.

Some Eye and Ear Troubles that Pertain to General Diseases, Dr. L. O. Mauldin, of Greenville.

Maternal Nursing, Dr. W. F. Ashmore, Anderson.

Auto Intoxication, Dr. J. O. Sanders, Anderson.

An Unusual Type of Appendicitis, Dr. Theo. Maddox, Essayist for Union County Society.

Iritis, Dr. J. W. Keller, Spartanburg.

The Duties of the Anesthetizer, Dr. J. Townsend, Essayist Anderson County Society.

Essayist Pickens County Society, Dr. H. E. Russell.

Hookworm and Its Relation to Rural Sanitation, Dr. J. LaBruce Ward, State Director of Rural Sanitation, Columbia.

MEDICAL EXAMINATION FOR ALL LITTLE ONES.

INTERESTING MEETING.

Aiken County Medical Society Makes Forward Movement at Meeting.

At the meeting yesterday of the Aiken County Medical Society, the subject of medical and dental examination of school children in South Carolina was discussed with the view of bringing the same to the attention of the State legislature. An intensely interesting paper was read by Dr. B. H. Teague, and Drs. Harry Wyman, H. J. Ray, T. G. Croft and others, among them Cecil Seigler, County Superintendent of Education, entered into the discussion.

Dr. Harry Wyman suggested that permission be secured to have medical men give lectures once a month to the school children of Aiken County on the subject of personal hygiene, also public meetings when lectures would be given the parents of school children. Statistics read reveal an alarming state of affairs all over the country as regards neglect of the health of children, especially their teeth, and the Medical Society took the position that to take the child in hand and educate it on these lines in its formative period will eventually place the whole population of the State upon an entirely different basis.

It is the intention of the Medical Society to start a movement in this direction, and a resolution was passed asking the legislature to lend assistance.

DR. JEFFORDS RETURNS FROM HOSPITAL.

Dr. T. A. Jeffords, who has been at the Columbia Hospital for three weeks, having undergone an operation,

returned to his home this afternoon to the great delight of his numerous patients and friends. Dr. Jeffords was quite ill for some days after the operation, but is now well and in splendid shape.

DEATH OF DR. F. J. GEIGER.

PROMINENT CALHOUN PHYSICIAN, HONORED VETERAN PASSES AWAY.

(The News and Courier, Charleston, S. C., Dec. 1, 1910.)

Dr. Franklin J. Geiger died this morning at 2:30 o'clock at his home, eight miles north of St. Matthews. He had been in declining health for some time and the end was not unexpected. Calhoun County was proud of such a citizen and mourns over his loss. There was not a man who ever came under his influence who did not soon learn that he was true—every inch of him. Nobody ever questioned his honesty and merit, nor was it ever difficult to find out where he stood upon the issues of the day. He was a staunch friend through good and evil report, and when he lost faith in others it was seldom regained.

Dr. Gieger was seventy-five years old, and stood on the honor roll of the Confederate army.

He graduated from the Charleston Medical College in 1858 and practiced forty-seven years with great success in and around his native heath. In his 23d year he married a cousin, Miss Anna C. Gieger, then of Charleston. She preceded him to the grave five years ago. Their married life was typically ideal of domestic harmony and felicity. After her death the devoted husband lost heart and frequently remarked that life had little more for him.

From the union were born fifteen children, of whom eight sons and three daughters survive, as follows: Drs. Chas. B., a physician, and Frank, a dentist, both of Manning; Godfrey, a successful lawyer, of Anderson; Percy, of the Denmark graded schools; Rufus, assistant cashier of the Home Bank, St. Matthews; Harold, a trusted salesman of Banks & Wimberly Co.; Herbert Gieger, a well known farmer, of Sandy Run; Elliott, a successful farmer at the old home; Mrs. P. H. E. Derrick, of Blythewood, and Misses Lizzie, Lou and Anna at the old home.

It has been frequently commented upon by the public that with this large family of sons and daughters there is not a black sheep in the flock and all have carried into their daily life and conduct the principles and ideals which were practiced by their honored parents and taught to the children from the cradle up.

Dr. Gieger's father was the Hon. Jno. C. Gieger, who was prominent in his day and was one of the signers of the Ordinance of Secession.

The remains of the deceased will be laid away in the old burying ground of the Sandy Run Lutheran Church, of which he was a faithful member all his life, to-morrow morning at eleven o'clock.

Rupture of the urethra occurring between the posterior layer of the triangular ligament and the scrotum is one of the most serious accidents in surgery, and demands immediate operation.

A very handy and compact little 1911 memoranda for a medical man has just been issued by Lea & Febiger, Publishers, Philadelphia. This booklet is particularly adapted for the young practitioner, offering valuable data within its 32 pages of printed matter. It is neatly bound and answers in every respect the purpose for which it is designed.

POPE SAID:

"The learn'd reflect on what before they knew."

As the Winter approaches, conditions prevalent with the season will present themselves for the consideration of the physician.

At this time it might be well to recall that Antiphlogistine, applied thick and hot, will offer unmeasurable relief in those cases of Bronchitis; Tonsillitis; Laryngitis; Pleurisy and other throat and chest affections you will be called upon to treat.

Satisfactory therapeutic results invariably follow the application of Antiphlogistine and to guard against substitution, it is well to specify an original package, thus protecting your patient as well as yourself.

A TRIUMPH IN PILL-MAKING.

Parke, Davis & Co. confess that their soft-mass pill, which is now receiving so much favorable attention from the medical world, was for a long time a "hard nut" to crack. They had set out to produce by the soft-mass process a pill that should be a credit to their house and to manufacturing pharmacy. The task at first seemed simple enough. Here, as elsewhere, theory and practice were at variance. As a matter of fact, a good deal of experimentation had to be done. Time was consumed. Money was expended. In the end, of course, ingenuity triumphed.

In structure the soft-mass pill, as manufactured by Parke, Davis & Co., consists of a plastic mass encompassed by a thin, soluble chocolate coating. It may be flattened between the thumb and finger like a piece of putty. An important advantage of the soft-mass pill is the readiness with which it dissolves or disintegrates in the digestive tract. Another commendable feature is that, no heat being applied in the process, such volatile substances as camphor, the valerianates, the essential oils, ets., are not dissipated, so that any pill embodying one or more of these substances may be depended upon to contain just what the label says it contains.

Parke, Davis & Co. are putting out close to thirty formulas by the soft-mass process—all of them listed, we believe, in advertisements now appearing quite generally in the medical press. Practitioners under whose eyes these announcements do not happen to fall may profitably write the company, at its home offices in Detroit, for a copy of a recently issued folder on "Soft-Mass Pills," which contains titles and complete formulas of all the pills now manufactured by Parke, Davis & Co. under the process referred to, together with some other important information.

HYDROLEINE

An emulsion of cod-liver oil after a modification of the formula and process devised by H. C. Bartlett, Ph. D., F. C. S., and G. Overend Drewry, M. D., M. R. C. S., London, England.

Distinctively Palatable
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Ethical Stable

Hydroleine is simply pure, fresh, cod-liver oil thoroughly emulsified, and rendered exceptionally digestible and palatable. Its freedom from medicinal admixtures admits of its use in *all* cases in which cod-liver oil is indicated. The average adult dose is two teaspoonfuls. Sold by druggists. Sample with literature will be sent *gratis* on request.

THE CHARLES N. CRITTENTON CO.
115 FULTON ST., NEW YORK

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